DRAFT

Project Definition Report

Submitted to FAA for Review and Comment

O'Hare Modernization Program
January 2003

O'HARE MODERNIZATION PROGRAM
PROJECT DEFINITION
(DRAFT)

Submitted to FAA for Review and Comment

Prepared for:
City of Chicago, Department of Aviation

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1. Introduction

This Project Definition Report describes the O'Hare Modernization Program (OMP). Specifically, information on the physical and operational characteristics of program elements are presented and discussed to provide a description of the concept for use in subsequent analyses.

The document is divided into the following sections:

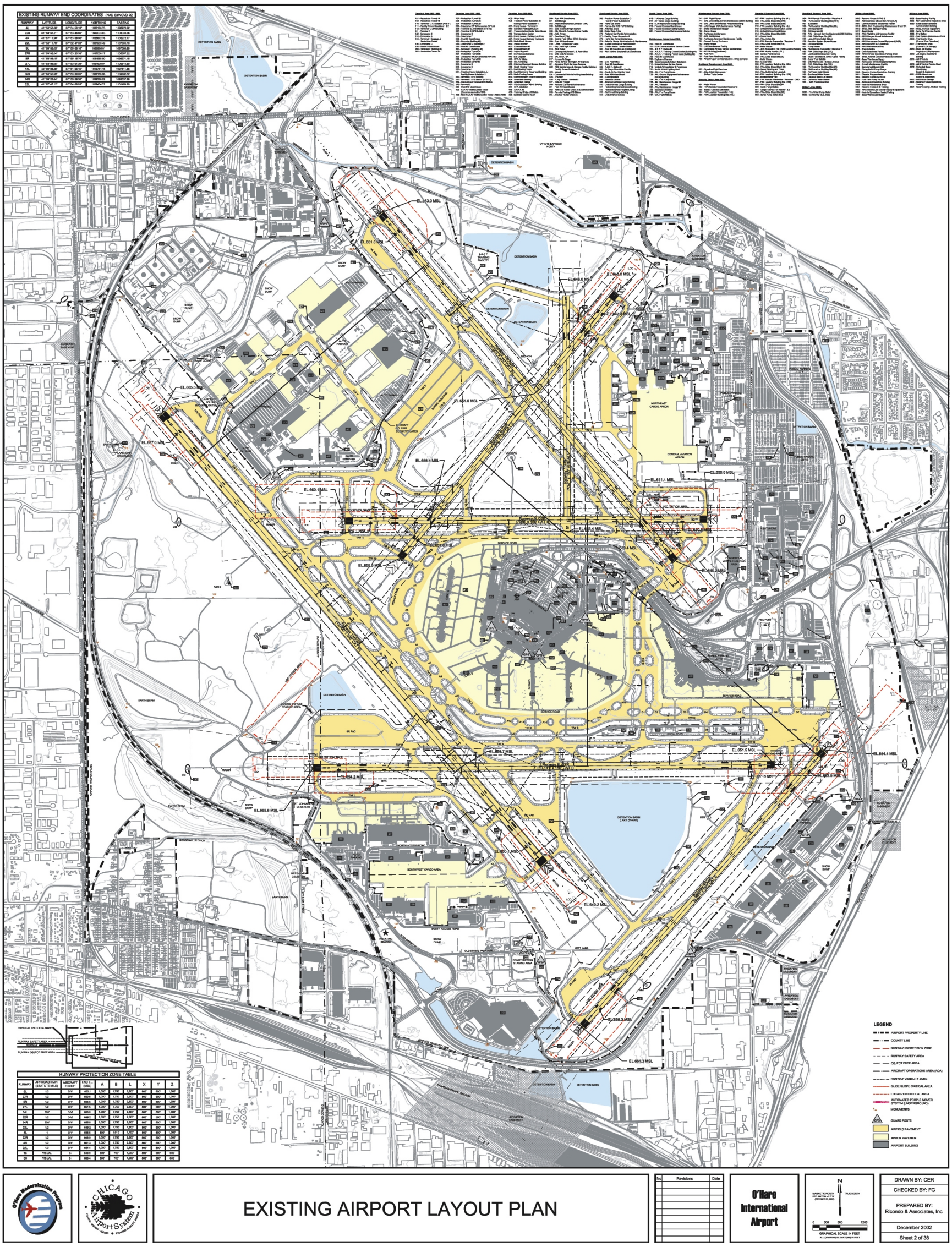
- Background
- Airfield Plan
- Terminal Plan
- South Airfield Facilities
- North Airfield Facilities
- Landside and Airport Access
- Land Acquisition
- Phasing Plan
- Additional Capabilities
- Deviations From Standards

Each of these sections describes specific elements of the OMP and is further subdivided as necessary to facilitate the review of information presented.

2. Background

In June 2001, the City of Chicago (City) released a concept plan for the redevelopment of Chicago O'Hare International Airport. The concept envisioned the reconfiguration of O'Hare's airfield and the development of terminal and roadway access facilities on the west side of the Airport. Specifically, the existing airfield configuration (**Exhibit 1**) which consists of three sets of parallel runways (Runways 14-32, 9-27, and 4-22) and a single Runway 18-36, would be reconfigured to provide six runways in the 9-27 orientation and two runways in the 4-22 orientation (**Exhibit 2**). This reconfiguration allows for expansion of terminal facilities to the west and ultimate development of western access to the Airport. It not only improves the operational efficiency of the airfield under existing operational demands, but also allows the Airport to meet aviation demands for the foreseeable future and to accommodate New Large Aircraft (NLA) such as the Airbus A-380.

In December 2002, the City of Chicago submitted an Airport Layout Plans (ALP) Package to the Federal Aviation Administration (FAA) for review and comment. The ALP submitted to FAA, shown in Exhibit 2, depicts the plan proposed by the City following refinement of the concept unveiled in 2001. The plan, known as the O'Hare Modernization Program, reflects technical refinements as well as input received from various stakeholders. This document describes the physical and operational characteristics of the plan as presented in the December 2002 ALP.

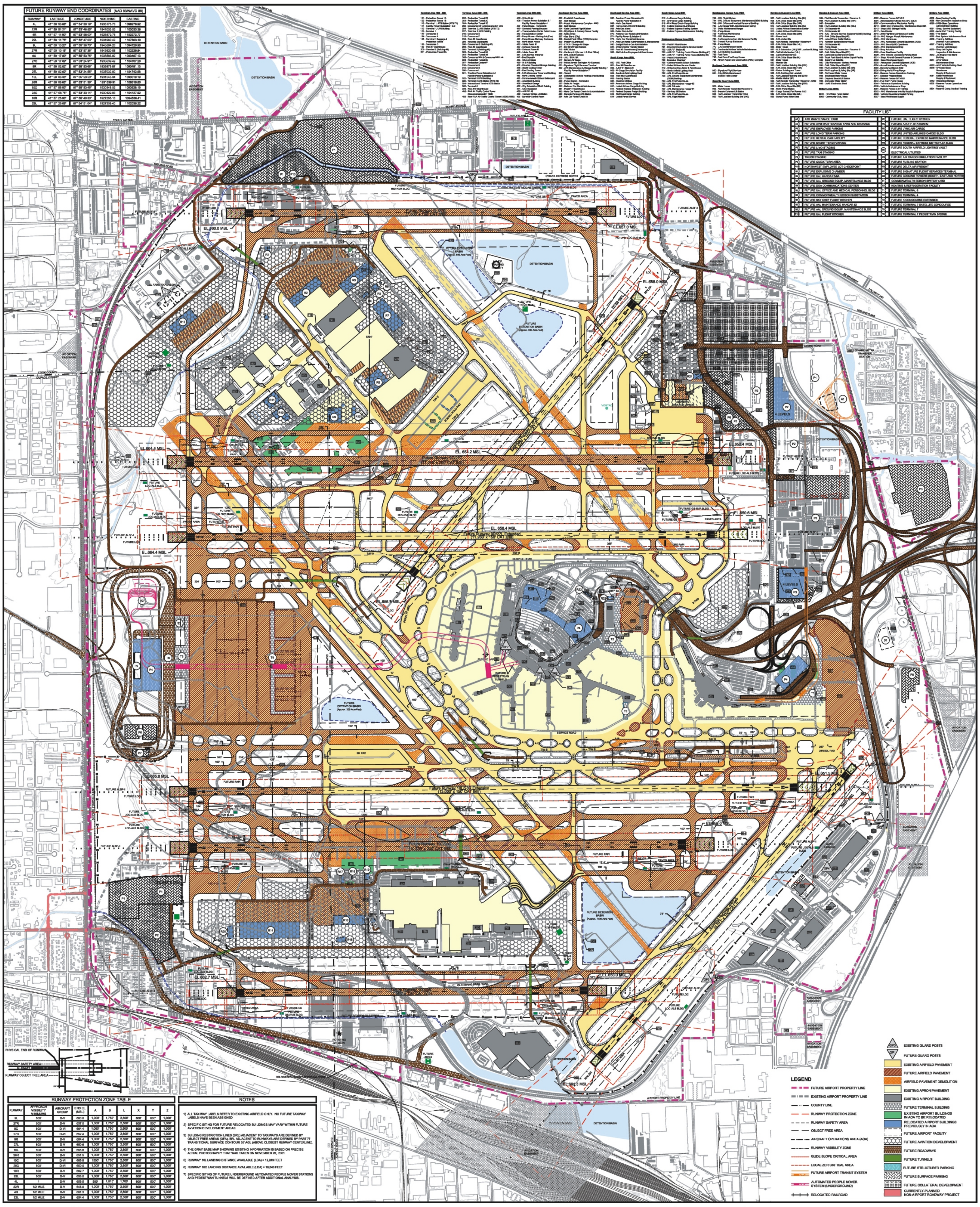


Source: Ricondo & Associates, Inc.
Prepared by: Ricondo & Associates, Inc.

Exhibit 1

Existing Airport Layout Plan

Z://Chicago/ORD/OMP/graphics/Project Definition Notebook/Future Airport Layouts.cdr



FUTURE RUNWAY END COORDINATES (NAD 83/NAVD 88)

RUNWAY	LATITUDE	LONGITUDE	NORTHING	EASTING
4L	41° 58' 53.88"	87° 54' 50.19"	1936176.73	1098278.92
22R	41° 59' 51.21"	87° 53' 46.85"	1942003.03	1103033.36
4R	41° 57' 11.90"	87° 53' 58.00"	1925872.78	1102272.77
22L	41° 58' 11.76"	87° 52' 47.03"	1931960.49	1107603.10
9L	42° 00' 10.20"	87° 55' 36.70"	1943884.26	1094729.90
27R	42° 00' 10.19"	87° 53' 57.36"	1943920.58	1102229.84
9C	41° 59' 17.89"	87° 55' 53.75"	1938583.82	1093467.13
27C	41° 59' 17.89"	87° 53' 24.91"	1938639.49	1104707.20
9R	41° 59' 02.02"	87° 55' 53.66"	1936976.87	1093481.13
27L	41° 59' 02.02"	87° 53' 24.55"	1937032.80	1104742.88
10L	41° 58' 08.38"	87° 55' 53.50"	1931548.04	1093519.19
28R	41° 58' 08.85"	87° 53' 01.39"	1931639.91	1106519.80
10C	41° 57' 56.53"	87° 55' 53.45"	1930348.02	1093528.19
28C	41° 57' 56.75"	87° 53' 33.14"	1930422.98	1104127.92
10R	41° 57' 25.93"	87° 55' 40.30"	1927255.13	1094536.41
28L	41° 57' 26.09"	87° 54' 01.04"	1927308.40	1102036.22

FACILITY LIST

A1	ATS MAINTENANCE YARD	R11	FUTURE UAL FLIGHT KITCHEN
A2	FUTURE APM MAINTENANCE YARD AND STORAGE	R12	FUTURE A.R.F.F. STATION #2
P1	FUTURE EMPLOYEE PARKING	R13	FUTURE LYNX AIR CARGO
P2	FUTURE LONG TERM PARKING	R14	FUTURE UNITED AIRLINES CARGO BLDG
P3	FUTURE RENTAL CAR FACILITY	R15	FUTURE FEDERAL EXPRESS MAINTENANCE BLDG
P4	FUTURE SHORT TERM PARKING	R16	FUTURE FEDERAL EXPRESS METROPLEX BLDG
P5	FUTURE LIMO STAGING	R17	FUTURE SOUTH AIRFIELD LIGHTING VAULT ELECTRICAL UTILITIES
P7	FUTURE TAXI STAGING		
P8	TRUCK STAGING	R18	FUTURE AIR CARGO SIMULATION FACILITY
P9	FUTURE QUICK TURN AREA	R19	FUTURE FUELING STATION
P10	NORTHWEST EMPLOYEE LOT CHECKPOINT	R20	FUTURE DELTA AIR FREIGHT
R1	FUTURE EXPLOSIVE CHAMBER	R21	FUTURE SIGNATURE FLIGHT SERVICES TERMINAL
R2	FUTURE UAL HANGAR SSA	R22	FUTURE COOLING TOWERS (SOUTH, EAST AND NORTH)
R3	FUTURE UAL GROUND EQUIP. MAINTENANCE BLDG	S1	COMMONWEALTH EDISON SWITCH YARD
R4	FUTURE DOA COMMUNICATIONS CENTER	S2	HEATING & REFRIGERATION FACILITY
R5	FUTURE UAL OFFICE AND MEDICAL PERSONNEL BLDG	T1	FUTURE TERMINAL 6
R6	FUTURE COMMONWEALTH EDISON SUBSTATION	T2	FUTURE TERMINAL 4
R7	FUTURE SKY CHEF FLIGHT KITCHEN	T3	FUTURE K CONCOURSE EXTENSION
R8	FUTURE AAL MAINTENANCE HANGAR #2	T4	FUTURE TERMINAL 7 SATELLITE CONCOURSE
R9	FUTURE AAL GROUND EQUIP. MAINTENANCE BLDG	T5	FUTURE TERMINAL 7
R10	FUTURE UAL FLIGHT KITCHEN	T6	FUTURE TERMINAL 7 PEDESTRIAN BRIDGE

RUNWAY PROTECTION ZONE TABLE

RUNWAY	APPROACH VISIBILITY MINIMUMS	AIRCRAFT GROUP	END EL. (MSL)	A	B	L	X	Y	Z
9L	600'	D-V	660.0	1,000'	1,750'	2,500'	800'	500'	1,000'
27R	600'	D-V	657.0	1,000'	1,750'	2,500'	800'	500'	1,000'
9C	600'	D-VI	664.4	1,000'	1,750'	2,500'	800'	500'	1,000'
27C	600'	D-VI	652.4	1,000'	1,750'	2,500'	800'	500'	1,000'
9R	600'	D-V	664.4	1,000'	1,750'	2,500'	800'	500'	1,000'
27L	600'	D-V	650.6	1,000'	1,750'	2,500'	800'	500'	1,000'
10L	600'	D-V	665.8	1,000'	1,750'	2,500'	800'	500'	1,000'
28R	600'	D-V	651.5	1,000'	1,750'	2,500'	800'	500'	1,000'
10C	600'	D-VI	665.8	1000'	1,750'	2,500'	800'	500'	1,000'
28C	600'	D-VI	650.0	1,000'	1,750'	2,500'	800'	500'	1,000'
10R	600'	D-V	662.7	1,000'	1,750'	2,500'	800'	500'	1,000'
28L	600'	D-V	658.0	1,000'	1,750'	2,500'	800'	500'	1,000'
4L	1	D-V	655.5	500'	1,010'	1,700'	800'	500'	1,000'
22R	1/2 MILE	D-V	648.0	1,000'	1,750'	2,500'	800'	500'	1,000'
4R	1/2 MILE	D-V	661.3	1,000'	1,750'	2,500'	800'	500'	1,000'
22L	1/2 MILE	D-V	654.4	1,000'	1,750'	2,500'	800'	500'	1,000'

NOTES

1) ALL TAXIWAY LABELS REFER TO EXISTING AIRFIELD ONLY. NO FUTURE TAXIWAY LABELS HAVE BEEN ASSIGNED
2) SPECIFIC SITING FOR FUTURE RELOCATED BUILDINGS MAY VARY WITHIN FUTURE AVIATION DEVELOPMENT AREAS.
3) BUILDING RESTRICTION LINES (BRL) ADJACENT TO TAXIWAYS ARE DEFINED BY OBJECT FREE AREAS (OFA). BRL ADJACENT TO RUNWAYS ARE DEFINED BY PART 77 TRANSITIONAL SURFACE CONTOUR 35' AGL (ABOVE CLOSEST RUNWAY CENTERLINE).
4) THE GRAY BASE MAP SHOWING EXISTING INFORMATION IS BASED ON PRECISE AERIAL PHOTOGRAPHY THAT WAS TAKEN ON NOVEMBER 20, 2001.
5) RUNWAY 10L LANDING DISTANCE AVAILABLE (LDA) = 12,249 FEET
6) RUNWAY 10C LANDING DISTANCE AVAILABLE (LDA) = 10,543 FEET
7) SPECIFIC SITING OF FUTURE UNDERGROUND AUTOMATED PEOPLE MOVER STATIONS AND PEDESTRIAN TUNNELS WILL BE DEFINED AFTER ADDITIONAL ANALYSIS.

Source: Ricondo & Associates, Inc.
Prepared by: Ricondo & Associates, Inc.

Exhibit 2

Future Airport Layout Plan

Z://Chicago/ORD/OMP/graphics/Project Definition Notebook/Future Airport Layouts.cdr

3. Airfield Plan

The Airfield Plan for the OMP, as shown in **Exhibit 3,** adds one new runway to the north airfield and reconfigures three other runways (Runway 18-36 and Runways 14L-32R and 14R-32L) to effect a transition to an essentially east/west traffic flow configuration. The existing two 4-22 runways are maintained for wind coverage purposes and additional operational flexibility. Additionally, existing Runways 9L-27R and 9R-27L are extended to the west to better satisfy long-haul aircraft departure requirements and to provide operational flexibility for ground taxi of aircraft crossing active runways. New runway ends are located to satisfy clearance requirements for Category II/III operations. The center runways on the north and south airfields are designed to meet FAA Airplane Design Group (ADG) VI standards, while other runways are designed to FAA ADG V standards. The following further describes the components of the airside facilities both physically and operationally.

3.1 Airfield Facility Characteristics

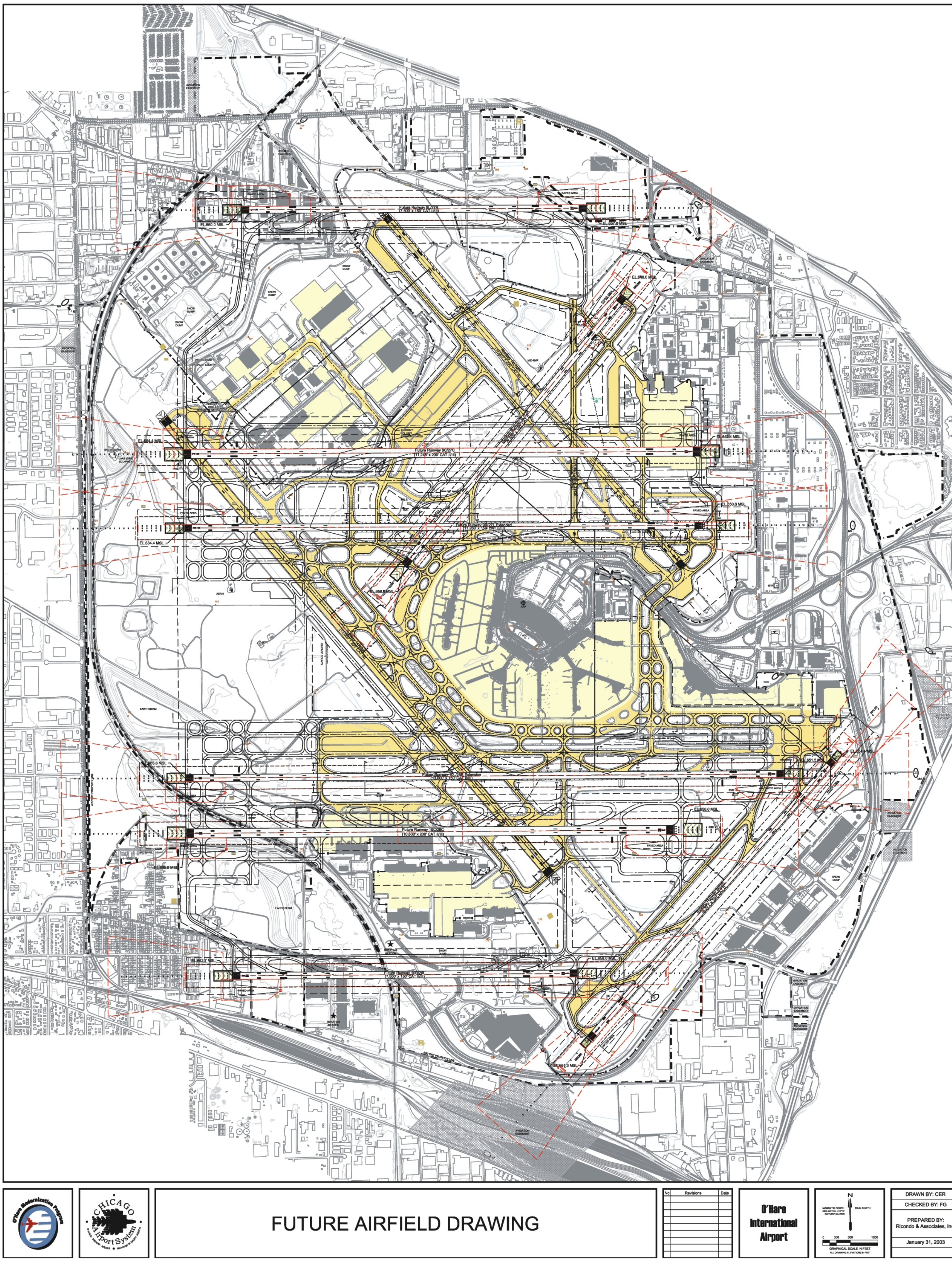
The following sections describe the physical characteristics of the OMP airfield facilities. For ease of review, North Airfield Facilities and South Airfield Facilities are discussed separately. For the purposes of this discussion, runways are labeled according to their ultimate numerical designation unless otherwise noted.

3.1.1 North Airfield Facilities

New Runway 9L-27R – Construct, light and mark a new runway 6,901 feet north of existing Runway 9L-27R. The runway will be 150 feet wide and 7,500 feet long, and operate primarily as an arrival runway both in west and east traffic flows. The length of this runway will satisfy landing and departure runway length requirements for ADG IV and smaller aircraft for the majority of domestic markets. Runway 9L-27R is separated from its parallel taxiway by 500 feet west of existing Taxiway P and by 400 feet east of existing Taxiway P. The 400-foot runway-to-taxiway separation on the east end of the runway is a result of the land-use requirements for the North Airfield detention basin.

For ADG V aircraft, the standard runway centerline to parallel taxiway centerline separation is 400 feet. However, Terminal Instrument Procedures (TERPS)[1] criteria for Category II/III approaches requires a runway to parallel taxiway centerline separation of 500 feet for ADG V aircraft taxi operations, with 400-foot spacing reserved for taxi of aircraft with wingspans less than 171 feet and tail heights less than 55 feet (typically ADG IV or less). On this basis, Category II/III approaches by ADG V aircraft landing on Runway 27R will exit the runway and either taxi south on the north-south taxiway at the Runway 9L end, or taxi back on the parallel taxiway to Taxiway P before proceeding south. Conversely, ADG V aircraft conducting Category II/III approaches to Runway 9L will exit the runway and proceed south on the north-south taxiway at the Runway 27R end to avoid a "back-taxi" on the 400-foot spacing portion of the parallel taxiway.

[1] Contained in TERPS Instruction Letter TIL00-005A, *Interim Category II/III Obstruction Clearance Criteria*, September 18, 2000.



Source: Ricondo & Associates, Inc.
Prepared by: Ricondo & Associates, Inc.

Exhibit 3

Future Airfield Drawing

Z://Chicago/ORD/OMP/graphics/Project Definition Notebook/Future Airport Layouts.cdr

New Runway 9L-27R requires land acquisition northwest of the existing airport boundary. On the east end of the runway, the Object Free Area (OFA) and Runway Safety Area (RSA) are contained within airport property; however, avigation easements are proposed for portions of the Runway Protection Zone (RPZ) not on airport property. The area of the RPZ out to where the 50:1 approach surface obtains a height of at least 35 feet above the runway end elevation is within airport property and will be controlled. All areas in the RPZ on the west end are within the proposed ultimate airport property.

Runway 9C-27C (Relocated Runway 14L-32R) – Construct, light and mark a new runway with a centerline 1,607 feet north of existing Runway 9L-27R. This runway will be 11,245 feet long with a width of 200 feet to satisfy ADG VI aircraft. The runway is served by 100-foot wide parallel taxiways to the north and south with an ADG VI runway-to-taxiway separation distance of 600 feet. The runway has three high-speed exit taxiways, two to facilitate Runway 27C landings and one to accommodate Runway 9C landings.

Runway 9C-27C will primarily be an arrival runway under both Visual Meteorological Conditions (VMC) and Instrument Meteorological Conditions (IMC). The spacing from Runway 9R-27L protects for a future option to relocate Runway 9R-27L to the north to provide dual ADG V taxiways around the north side of the terminal area. (This runway relocation is not proposed under the OMP and is not included on the ALP; however, it was studied extensively as part of the 1991 Delay Task Force and is not precluded by the OMP.) The east end of the runway is located approximately 1,150 feet west of Bessie Coleman Drive to provide a full runway safety area as well as clearance requirements from the Runway 9C localizer.

The previously planned realignment of Bessie Coleman Drive has been altered to prevent penetration of the Runway 27C Federal Aviation Regulation (FAR) Part 77 approach surface. The standard OFA and RSA are contained within the airside limits of the airfield; however, the limits of the OFA-extension include auto parking areas as well as the Airport Transit System (ATS) station. The east RPZ is contained entirely on airport property.

The existing ATS station is located approximately 1,900 feet east of the of Runway 27C threshold and thereby within the limits of the RPZ and the OFA-extension. However, the ATS does not penetrate the FAR Part 77 approach surface and, furthermore, it is not anticipated that the concentrations of persons at the ATS station would reach levels of assembly similar to facilities identified in AC 150/5300-13 as inappropriate in the RPZ ("….churches, schools, hospitals, office buildings, shopping centers, and other uses with similar concentrations of persons…"). There are no parking structures or appurtenances within the OFA-extension. While relocation of the Lot E auto surface parking was considered, such action was determined impractical given landside constraints.

On the west end of this runway, the RPZ out to where the 50:1 approach surface obtains a height of at least 35 feet above the runway end elevation is within airport property and will be controlled. Avigation easements are proposed for portions of this Runway Protection Zone (RPZ) not on airport property.

Runway 9R-27L (Extension of former Runway 9L-27R) – Construct, light and mark a west extension to Runway 9R-27L and the relocation of the Runway 27L threshold. The overall length of the modified runway is 11,260 feet at a width of 150 feet. This length represents an extension of 3,594 feet to the west end of the existing runway as well as the relocation of the east end of the runway 300 feet to the west to provide a full 1,000-foot RSA and localizer clearance from Bessie Coleman Drive. Runway 9R-27L is anticipated to be primarily a departure runway under both VMC and IMC conditions.

The existing parallel taxiway located south of the runway is maintained at the existing centerline separation of 365 feet; however, extension of the taxiway to the west has a standard 400 feet of runway to parallel taxiway centerline separation to satisfy ADG V requirements.

TERPS criteria allows for Category II/III approaches for taxiway centerline separations of 400 feet provided taxi operations are restricted to aircraft with wingspans less than 171 feet and tail heights less than 55 feet. During Category II/III approaches to Runway 9R-27L, aircraft using Taxiway H are anticipated to be restricted to ADG IV aircraft, or smaller. During IMC, Runway 9R-27L is anticipated to be primarily a departure runway, while Runway 9C-27C will be used for arrivals.

The RPZ for each runway end is contained within airport property limits, except for a small portion extending over York Road to the west where avigation easements are proposed. The height of the 50:1 approach surface over the property line at the west end is approximately 35 feet above the runway end elevation.

3.1.2 South Airfield Facilities

Runway 10L-28R (Extension of Runway 9R-27L) – Construct, light and mark a west 2,859-foot extension to Runway 10L-28R for an overall paved length of 13,000 feet and width of 150 feet. Runway 10L-28R is the longest runway planned and will provide sufficient runway distance available for "long-haul" markets (e.g., ORD-HKG).

The existing parallel taxiway located on the north side of the runway will be extended to the west end of the runway, spaced 500 feet from the runway centerline. Two new high-speed exit taxiways are also added to reduce runway occupancy time. The runway and exit taxiways are designed to ADG V standards; however, perpendicular (i.e., crossover) taxiways located at the runway ends are planned at 100-foot widths to satisfy ADG VI taxi movements requiring the crossing of Runway 10L-28R to/from Runway 10C-28C as well as the terminal area. Runway 10L-28R is envisioned primarily as an arrival runway under VMC and a departure runway under IMC.

As also included in the World Gateway Program, the east 3,500-foot portion of the parallel taxiway (east of exit Taxiway M5) will be modified to a 400-ft. runway-to-parallel taxiway separation to accommodate three taxiways and a taxilane south of Terminal 5. This is required for the queuing of departures and the general movement of aircraft around the terminal areas. TERPS criteria allows for Category II/III approaches for taxiway centerline separations of 400 feet provided taxi operations are restricted to aircraft with wingspans less than 171 feet and tail heights less than 55 feet. During Category II/III approaches to Runways 10L or 28R, ADG V aircraft may be restricted from using the portion of the parallel taxiway east of exit taxiway M5. During IMC, it is envisioned that Runway 10L-28R will be used primarily as a departure runway while Runway 10C-28C will be used for arrivals.

Taxiway Q, an exit taxiway off Runway 22R, is located within the current safety area off the east end of Runway 10L-28R and its use is prohibited under certain conditions when Runway 10L is used for landings in conjunction with Runway 22L. Under conditions such as these, the Runway Safety Area is violated. The new added length of the runway to the west allows the use of declared distances wherein the Landing Distance Available (LDA) for Runway 10L is reduced to 12,249 feet available, maintaining at least 1,000 feet of safety area beyond the LDA. Taxiway Q will be restricted and/or controlled during departure operations on Runway 10L and 28R, and during arrival operations on Runway 28R.

The west runway extension requires a realignment of the Union Pacific rail line. The Runway 10L approach RPZ extends west of York Road and airport property. The eastern RPZ is contained within airport property (including existing easement areas); however, easements are proposed for portions of the western RPZ and OFA-extension not contained on airport property. The area of the RPZ out to where the approach surface obtains a height of at least 35 feet above the runway end elevation is within airport property and will be controlled.

Runway 10C-28C (Relocated Runway 18-36) – Construct, light and mark a new runway with a centerline spacing 1,200 feet south of Runway 10L-28R. This new runway will be 10,600 feet long by 200 feet wide to satisfy ADG VI criteria. The runway has a full-length parallel taxiway on the north side spaced 600 feet from the runway centerline, and is anticipated to be primarily used for departures during VMC and landings during IMC. The runway, when used for departures, will be fed from the hold pads located on the south side of either end to accommodate the queuing of aircraft up to and including ADG VI. Departing ADG VI aircraft will access the Runway 28C hold pad area via existing Taxiway S (the Runway 4R-22L parallel taxiway) that will be upgraded to ADG VI width.

The proximity of Runway 10C-28C to the Southwest Cargo Area results in penetrations to the FAR Part 77 Transitional Surfaces by the Northwest Cargo Building and FedEx Cargo Building. To meet FAR Part 77 criteria, the center section of the runway would need to be raised approximately 23 feet or the facilities relocated at a substantial cost. Furthermore, a portion of Taxiway K would have to be raised approximately 9 feet to meet the FAA maximum runway to parallel taxiway grade criteria of 1.5 percent.

Through the use of TERPS criteria, the proposed runway profile follows existing ground contour elevations and maintains crossing point elevations with existing runways and taxiways. The TERPS Obstacle Clearance Surfaces based on this runway profile clear the FedEx and Northwest Cargo buildings allowing them to remain in their existing location, although nine light poles will have to be lowered or removed.

The localizer for Runway 10C is located between Taxiway S and the Runway 28C end with wingtip-to-object clearances sufficient for ADG VI aircraft. The Runway 28C threshold is displaced 200 feet west of the physical runway end. This arrangement maintains the required Runway Safety Area off the east end. Through the use of Declared Distances, 12,600 feet is available for Runway 10C departures and Runway 28C landings, whereas, Runway 28C has a departure length of 12,800 feet. A declared distance LDA of 12,543 feet has been applied to Runway 10C to provide at least 1,000 feet of safety area beyond the LDA, specifically to preclude the wings of aircraft on Taxiway S from penetrating the safety area. Taxiway S will be restricted and/or controlled during Runway 10C departures or Runway 28C arrivals.

The eastern portion of the RPZ is within airport property; however, construction of the western portion requires land acquisition and the realignment of the Union Pacific rail line. Additionally, the Runway 10C RPZ extends beyond airport property west of York Road. The standard OFA is contained within airport property; however, easements are proposed for portions of the RPZ not on airport property. The area of the RPZ out to where the 50:1 surface obtains a height of at least 35 feet above the runway end elevation is within airport property and will be controlled.

Runway 10R-28L (Relocated Runway 14R-32L) – Construct, light and mark a new runway with a centerline spacing 4,300 feet south of Runway 10C-28C. The runway is 7,500 feet in length and 150 feet wide to satisfy ADG V requirements. A full-length parallel taxiway is provided on the north side of the runway, spaced 400 feet from the runway centerline at a width of 75 feet. In addition to end crossover taxiways, two high-speed exit taxiways are provided near each runway end to facilitate aircraft exit from the runway. This runway is envisioned as being used as an arrival or departure runway in certain runway configurations. The length of this runway will satisfy landing and departure runway length requirements for ADG IV and smaller aircraft for the majority of domestic markets.

The runway-to-parallel taxiway centerline separation of 400 feet meets ADG V requirements and was adopted in lieu of the 500-foot spacing normally required of an ADG V Category II/III runway because of land-use requirements of the Southwest Cargo Area and the future South Airfield detention basin. TERPS criteria allows for Category II/III approaches for taxiway centerline separations of 400 feet provided that taxi operations are restricted to aircraft with wingspans less than 171 feet and tail heights less than 55 feet. On this basis, ADG V aircraft on Category II/III approaches to Runway 10R or 28L will exit the runway near its end and taxi directly to the north on the north-south taxiways to avoid use of the parallel taxiway as much as possible.

Both the east and west runway end elevations approximate existing grades in the area resulting in a relatively "flat" runway. Under the planned profile, roads and railroads in the Runway 10R approach pose penetrations to the FAR Part 77 surfaces. None of these items, however, violate TERPS obstacle clearance surfaces associated with this runway. To meet FAR Part 77 criteria, the west end of the runway would have to be raised approximately 26 feet in elevation. Such a runway profile is operationally undesirable and would add significant cost to the project.

Taxiway S is located in the east end of the Runway 10R-28L Runway Safety Area. As such, Taxiway S will be restricted and/or controlled during operations on Runway 10R-28L to ensure availability of the full safety area.

Runway 10R-28L will require land acquisition and relocation of Irving Park Road and the Union Pacific railroad tracks to accommodate construction of the runway, approach lighting system, approach surface and RPZ requirements. The OFA, RPZ and OFA-extension are contained within the ultimate airport property.

3.2 Airside Operations

The following pages outline the proposed general operating plans for the airside system. A more detailed description of the operating configurations will be provided in the simulation analysis document. The following are included in this document:

- Runway Operating Plans
- Primary Taxi Routes
- Primary Airspace Routes

General operating assumptions are outlined below.

3.2.1 Runway Operating Plans

The airfield plan provides for six parallel runways oriented in an east-west direction and two existing crosswind runways, 4R-22L and 4L-22R. The plan provides for triple approaches capable of supporting balanced departure and arrival capacity during all weather conditions, both VMC and IMC. It also allows for quad approaches during VMC to handle arrival peaks during high demand periods.

The potential use of runways for arrivals and/or departures under each operating configuration is illustrated in **Exhibit 4.** Fourteen potential runway-operating plans have been established including four primary configurations. The primary configurations — VFR east flow, VFR west flow, IFR east flow and IFR west flow — are illustrated in **Exhibits 5** though **8**.

The runway operating plans and associated runway configurations are determined by wind direction and other meteorological conditions. Weather minima required for each runway operating plan are contained within **Tables 1** and **2.**

Table 1

Approach Minima Criteria

	West Arrivals		East Arrivals	
Future Runway Designation	Decision Height	Visibility (SM)	Decision Height	Visibility (SM)
4L-22R	200	RVR 24 – ½	401	RVR 60 – 1¼
4R-22L	200	RVR 24 – ½	200	RVR 24 – ½
9L-27R	CAT IIIb	RVR 06	CAT IIIb	RVR 06
9C-27C	CAT IIIb	RVR 06	CAT IIIb	RVR 06
9R-27L[1/]	200	RVR 18 – ½	200	RVR 24 – ½
10L-28R	CAT IIIb	RVR 06	CAT IIIb	RVR 06
10C-28C	CAT IIIb	RVR 06	CAT IIIb	RVR 06
10R-28L	CAT IIIb	RVR 06	CAT IIIb	RVR 06

1/ The distance between the centerline of the runway and the centerline of Taxiway H may preclude the establishment of Category IIIb minima on this runway. Existing minima are shown.

Source: Ricondo & Associates, Inc.
Prepared by: Ricondo & Associates, Inc.

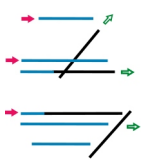
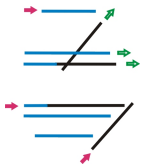
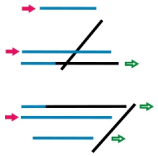
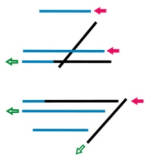
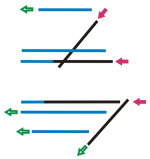
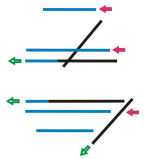
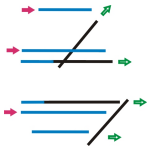
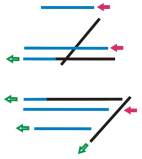
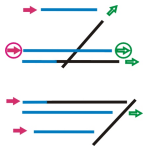
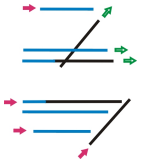
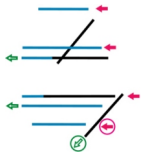
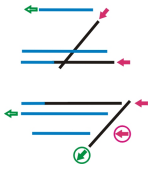
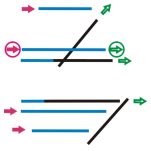
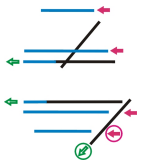
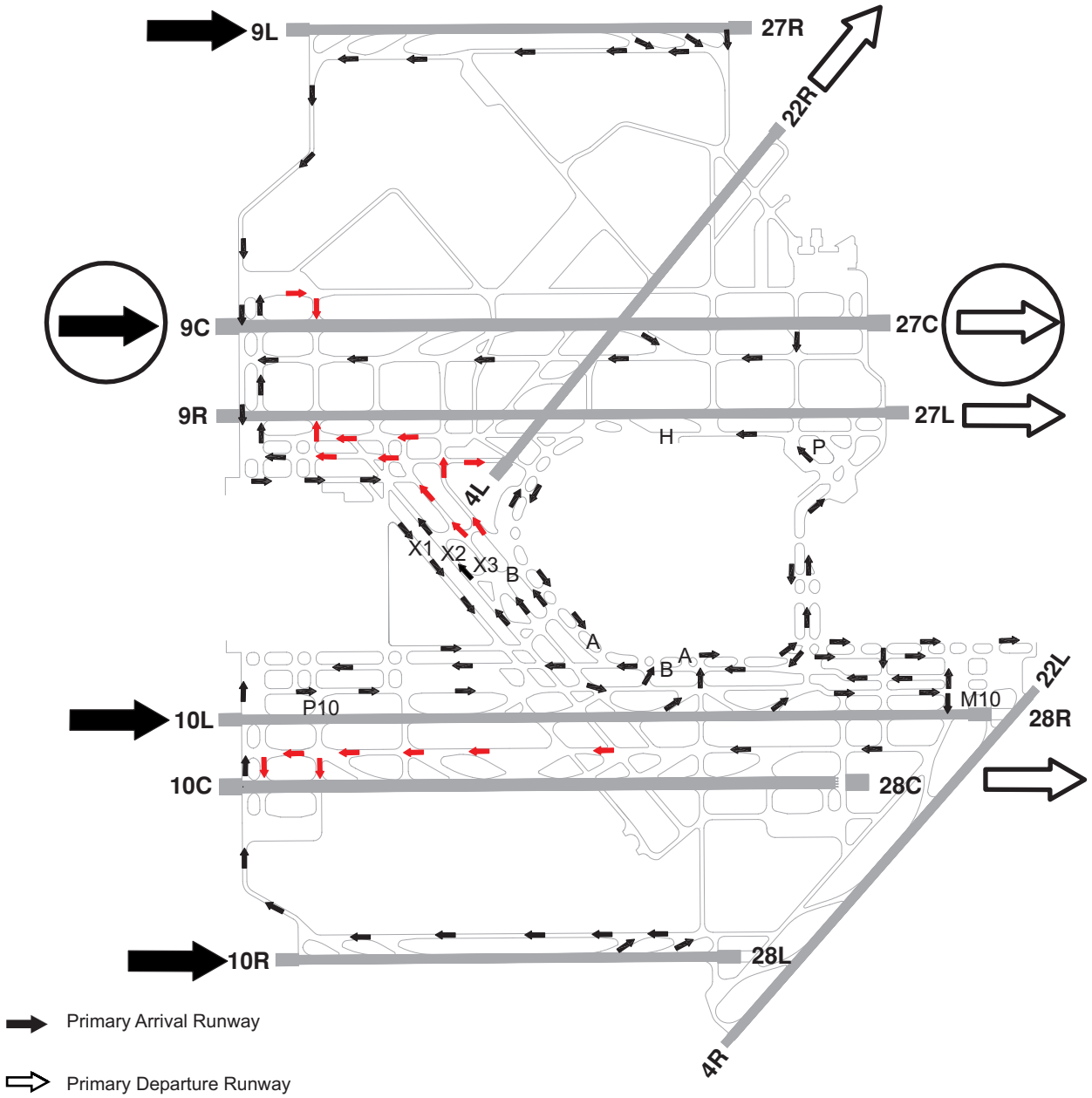
	VFR East		IFR East	VFR West		IFR West
	Parallel	Converging		Parallel	Converging	
Trips	LAHSO  #28A	 #29A	 #32	LAHSO  #30A	 #31A	 #33
	No LAHSO  #28C			No LAHSO  #30C		
Quads	LAHSO  #28	 #29		LAHSO  #30	 #31	
	No LAHSO  #28B			No LAHSO  #30B		

Exhibit 4

Runway Operating Plan

Z://Chicago/ORD/OMP/Project Definition Notebook/Exhibits/DiagramTable3.cdr



Primary Arrival Runway

Primary Departure Runway

Secondary Arrival Runway

Secondary Departure Runway

Sources: Ricondo & Associates, Inc., ORD ATCT
Prepared by: Ricondo & Associates, Inc.

Exhibit 5

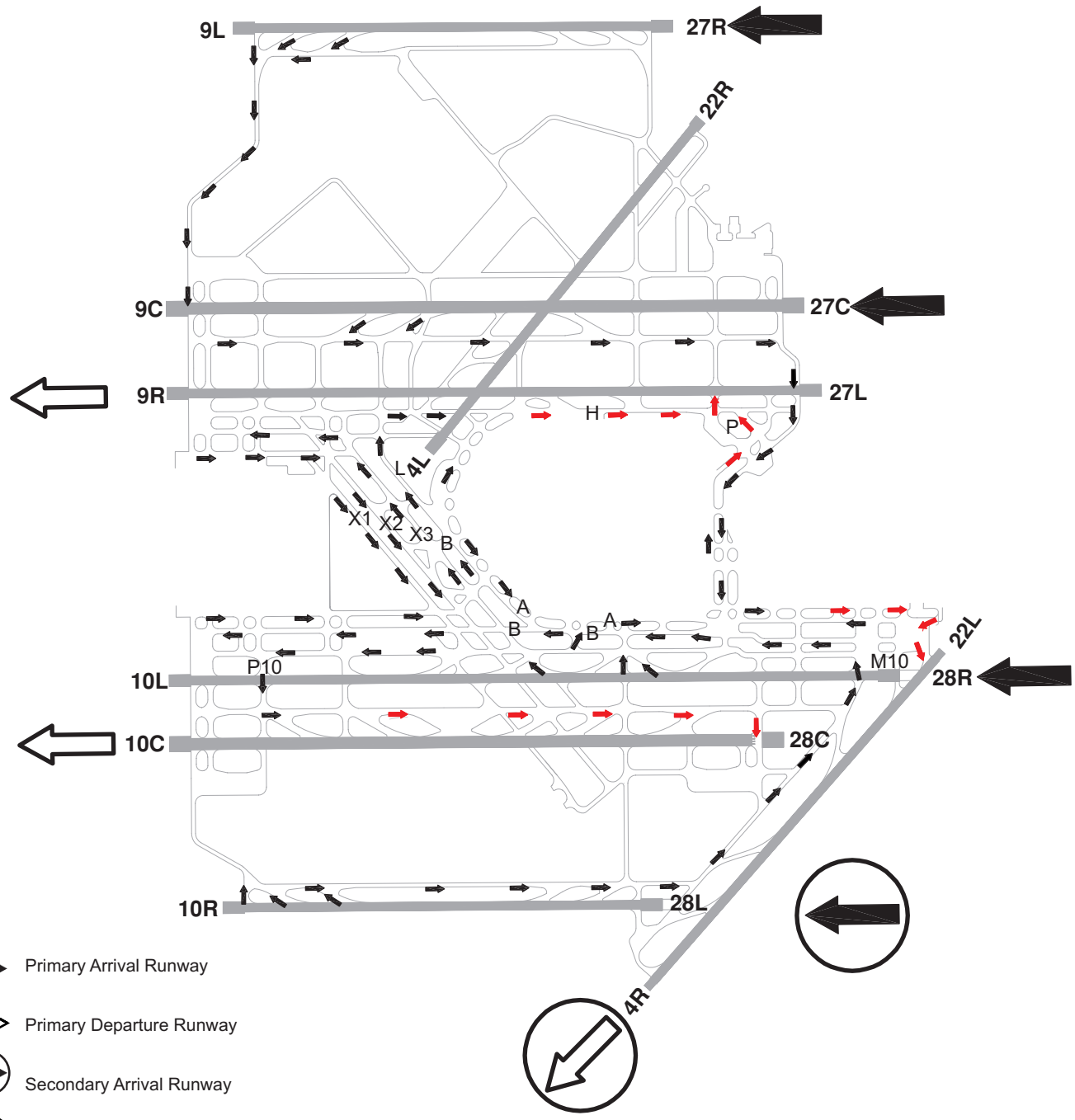
north

Arrivals and Departures

Departure Queue

Taxiway Flow
VFR East

Z:\Chicago\ORD\OMP\Project Definition Notebook\012003\Exhibits\Option 5 Taxiways.revised.cdr



Sources: Ricondo & Associates, Inc., ORD ATCT
Prepared by: Ricondo & Associates, Inc.

Exhibit 6

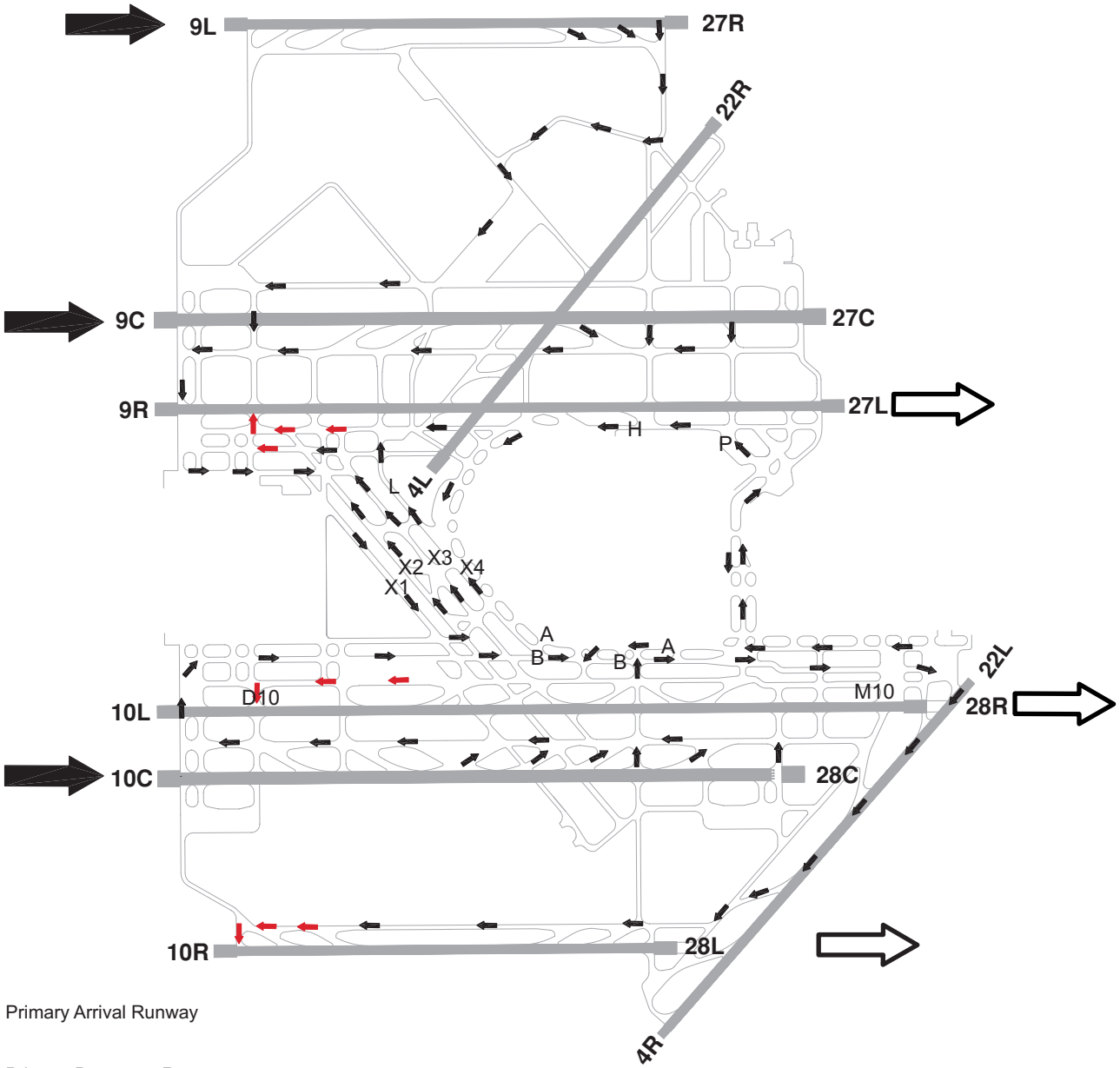
north

Arrivals and Departures

Departure Queue

Taxiway Flow VFR West

Z:\Chicago\ORD\OMP\Project Definition Notebook\012003\Exhibits\Option 5 Taxiways.revised.cdr



Primary Arrival Runway

Primary Departure Runway

Secondary Arrival Runway

Secondary Departure Runway

Sources: Ricondo & Associates, Inc., ORD ATCT
Prepared by: Ricondo & Associates, Inc.

Exhibit 7

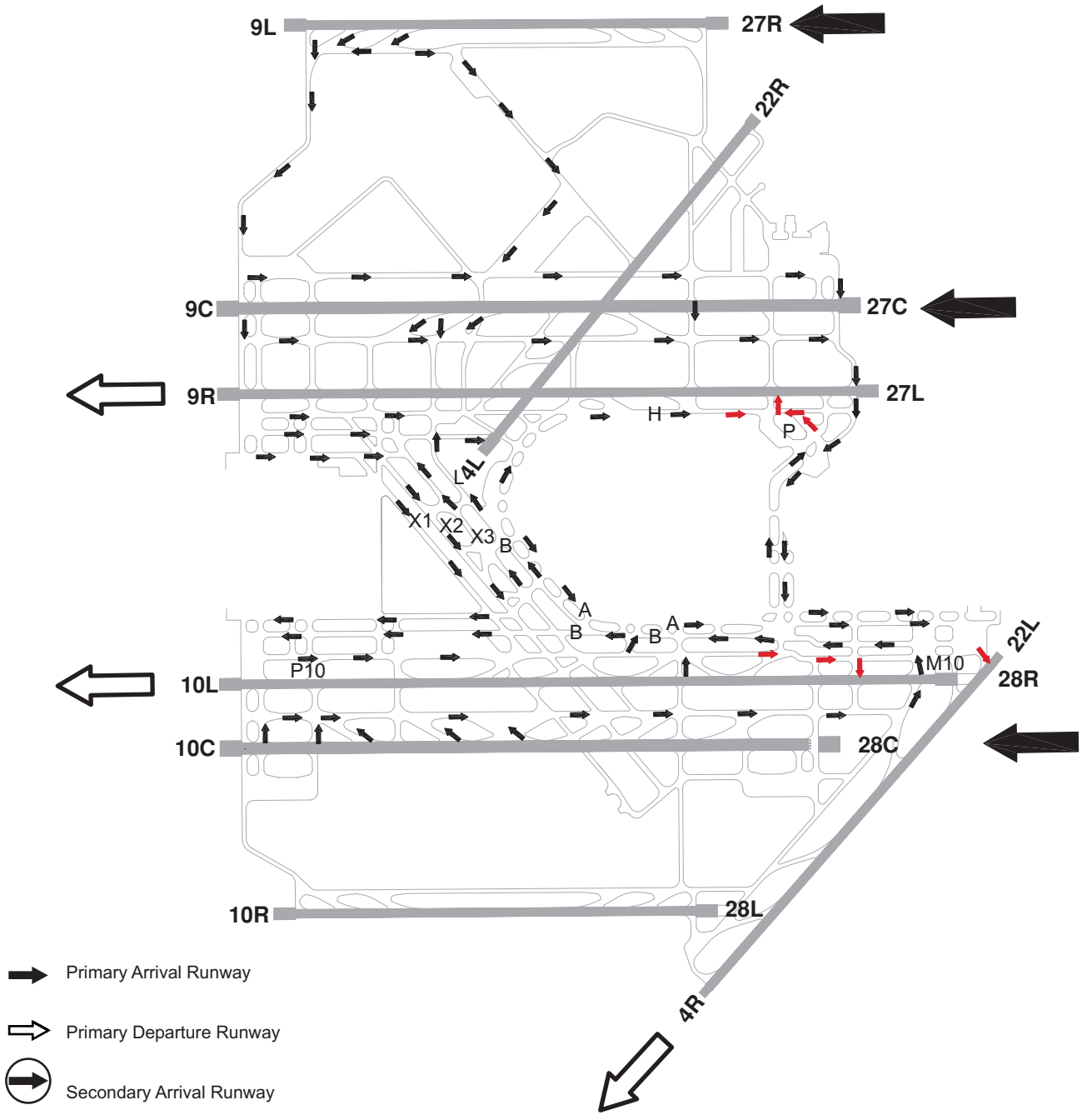
north

Arrivals and Departures

Departure Queue

Taxiway Flow IFR East

Z:\Chicago\ORD\OMP\Project Definition Notebook\012003\Exhibits\Option 5 Taxiways.revised.cdr



Sources: Ricondo & Associates, Inc., ORD ATCT
Prepared by: Ricondo & Associates, Inc.

Exhibit 8

north

Arrivals and Departures

Departure Queue

Taxiway Flow IFR West

Z:\Chicago\ORD\OMP\Project Definition Notebook\012003\Exhibits\Option 5 Taxiways.revised.cdr

Table 2

Configuration Minima

	Runways		Weather Required	
Configuration	Arrive	Depart	Ceiling	Visibility (SM)
VFR East Converging[1/]	4R 10R 10L 9L	4L 9R 9C	5,500	10
VFR West Converging[2/]	22R 27L 28R 28L	22L 28L 28C 27R	5,500	10
VFR East Parallel – LAHSO[2/]	9L 9C 10L 10R	4L 9C 9R 10C	5,500	10
VFR East Parallel – No LAHSO	9L 9C 10C 10R	4L 9C 9R 10L	5,500	10
VFR West Parallel – LAHSO[2/]	27R 27C 28R 28L	27L 28C 28L 22L	5,500	10
VFR West Parallel – No LAHSO	27R 27C 28C 28L	27L 28R 28L 22L	5,500	10
VFR East Converging	4R 10R 9L	4L 9R 9C	1,000	3
VFR West Converging	22R 27L 28R	22L 28L 28C 27R	1,000	3
VFR East Parallel – LAHSO	9L 9C 10L	4L 9R 10C 10R	1,000	3
VFR East Parallel – No LAHSO	9L 9C 10C	4L 9R 10L 10R	1,000	3
VFR West Parallel – LAHSO	27R 27C 28R	27L 28C 28L 22L	1,000	3
VFR West Parallel – No LAHSO	27R 27C 28C	27L 28R 28L 22L	1,000	3
IFR West	27R 27C 28C	27L 28R 22L	CAT IIIb	RVR 06
IFR East	9L 9C 10C	9C 9R 10L	CAT IIIb	RVR 06

1/ Should it become possible to conduct simultaneous approaches to three or more parallel runways with one runway separated by 4,300 feet, the minimums could be reduced to 1,500 and 5.
2/ Should it become possible to conduct simultaneous approaches to three or more parallel runways with one runway separated by 4,300 feet, the minimums could be reduced to 1,000 and 3.

Source: Ricondo & Associates, Inc.
Prepared by: Ricondo & Associates, Inc.

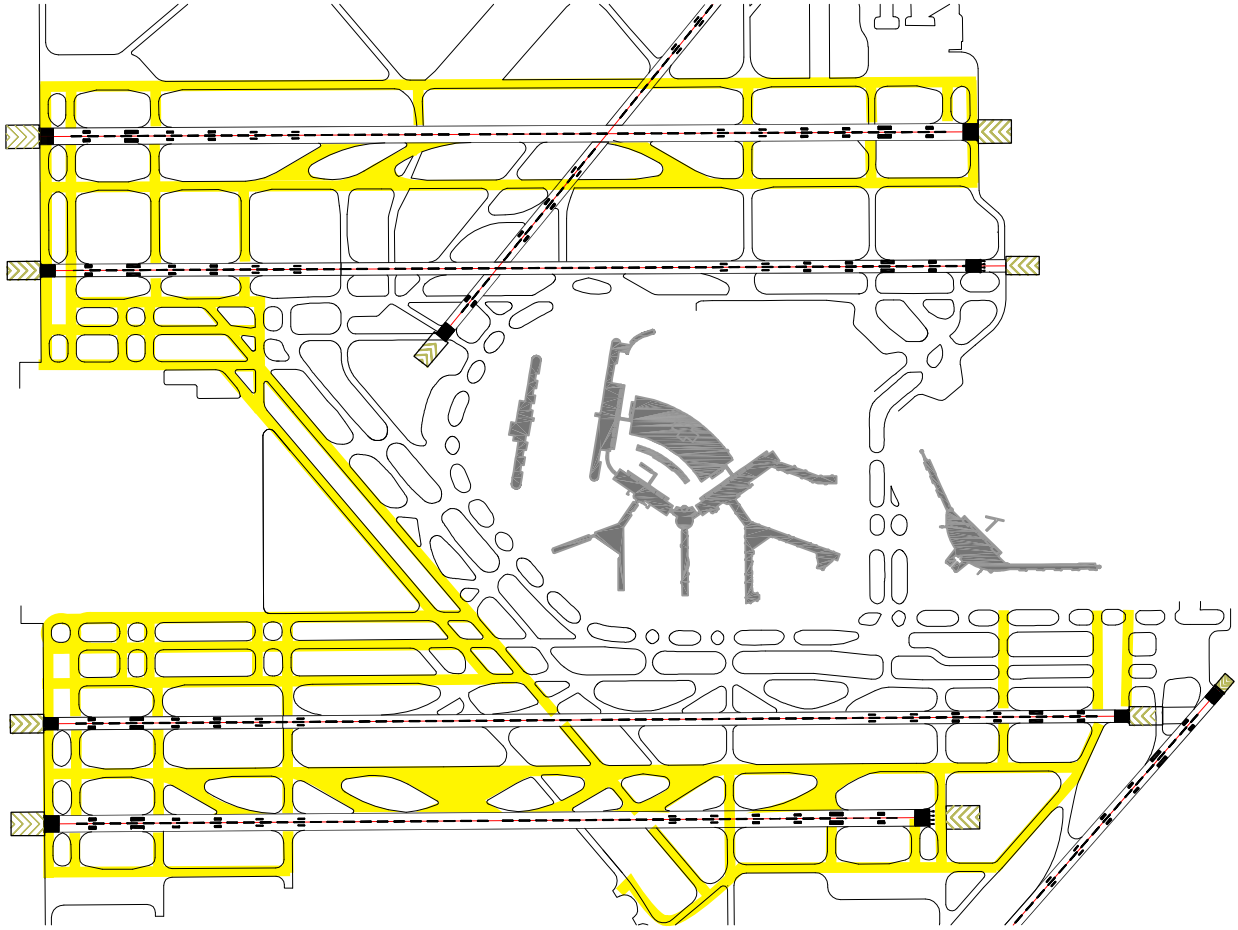
3.2.2 Primary Taxi Routes

The anticipated flow of aircraft between the runways and terminal gate areas is illustrated in Exhibits 5 through 8 for each of the primary runway operating plans.

- The taxi flows indicated are intended to avoid runway crossings to the maximum extent possible. Land and Hold Short Operations (LAHSO) are widely used to provide unimpeded aircraft ground movement and uncoordinated runway crossings under VMC and dry runways.
- Intersecting departures are also used to accommodate unimpeded ground movement and uncoordinated runway crossings of aircraft behind the departures in both VMC and IMC.
- Pushback areas are provided where possible to permit aircraft from adjacent gates to push back in the ramp areas without blocking taxiway traffic.
- Under all weather conditions, NLA (ADG VI) operations will be limited to Runways 9C-27C and 10C-28C. The supporting NLA capable taxiway system is highlighted in **Exhibit 9.**

3.2.3 Primary Airspace Routes

The existing four "corner-post" structure conceptually remains intact with some exceptions necessitated by the requirements to route aircraft to the center runways and to accommodate additional departure tracks in both east and west directions.



Source: Ricondo & Associates, Inc.
Prepared by: Ricondo & Associates, Inc.

Exhibit 9

north

Not to Scale

NLA Taxiway Routes

Z://Chicago/ORD/OMP/Project Definition Notebook/Materials/Airside/Taxiways Group 6.cdr

For comparison purposes, **Exhibit 10** depicts the existing generalized airspace structure while **Exhibit 11** depicts the proposed structure. Specific differences are:

- The northeast arrival fix, STORY, becomes PAYTN and is located 7.5 NM north-northwest of STORY over Lake Michigan. This action facilitates the addition of two departure tracks to the east.
- The current northwest arrival fix, KRENA, becomes TEDDY, which is located 7 NM northwest of KRENA along the same airway, V100. The move from KRENA to TEDDY allows for the addition of two departures routes to the west and provides for a more efficient arrival route to Runway 9C.
- Two additional arrival routes are added which are dependent on the runway configuration in use. They are the KNOX (OXI)-STYLE route from the southeast and the KELSI route from the southwest. On "East Flow" configurations, arrivals from the southwest would be routed over KELSI to a point 40 miles west of O'Hare. From this point the aircraft would proceed straight in to the intended arrival runway. Conversely, on "West Flow" configurations, aircraft from the southeast would use the (OXI)-STYLE route. These aircraft would proceed to a point 40 miles east of O'Hare and then continue straight in to the intended arrival runway.

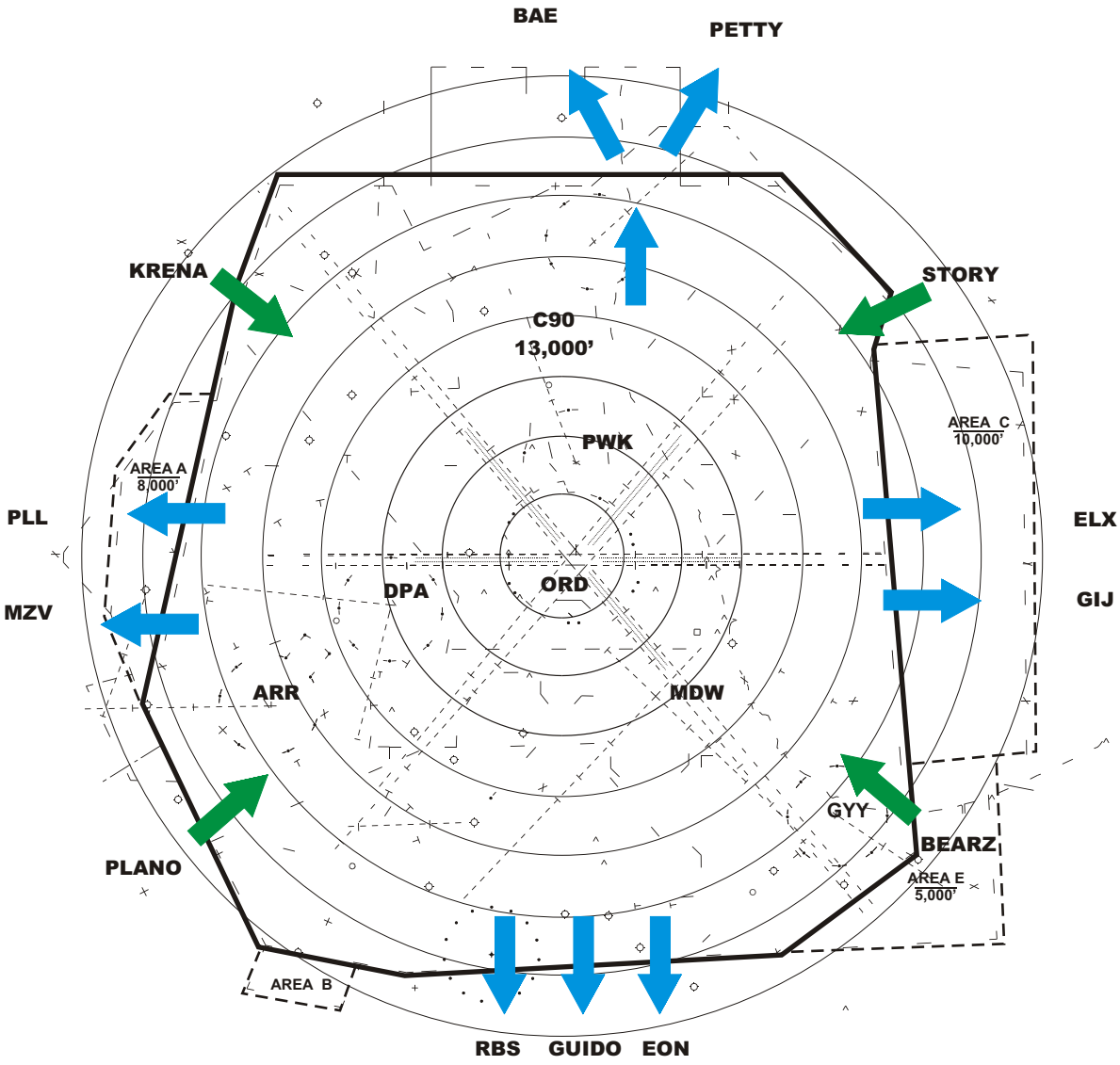
Generalized airspace routes for each primary operating configuration are illustrated in **Exhibits 12** through **15.**

3.2.3.1 VFR East Configuration – The VFR East Configuration consists of arrivals on Runways 9L, 9C, 10L, and, in periods of high arrival demand, 10R. In this configuration, departure runways are 4L, 9R, 10C, and, during periods of high departure demand, Runway 9C. Exhibit 12 depicts the primary arrival and departure paths associated with this operating configuration.

Departures - Eastbound traffic will be routed on east departure tracks whereas westbound traffic is routed north and south of the Runway 9/10 descent area. Departure traffic destined for cities in the northwestern U.S., Canada and some Pacific Rim locations will be routed north of the arrival descent area while traffic destined for cities between DFW and the LAX Basin will be routed south of the descent area.

3.2.3.2 VFR West Configuration – The VFR West Configuration consists of arrivals on Runways 27R, 27C, 28R and, during high levels of arrival demand, Runway 28L. Runways 27L, 28C and 22L will be used for departures. Exhibit 13 depicts the primary arrival and departure paths associated with this operating configuration.

Departures - Westbound traffic will be routed on west departure tracks whereas eastbound traffic will be routed both north and south of the arrival descent area. Aircraft destined for New England, Eastern Canada, and some European cities will be routed north of the Runway 27/28 descent area, while traffic destined to CLE, PIT, JFK, EWR and the Washington DC area will be routed south of the descent area.



Source: Ricondo & Associates, Inc., C90 TRACON
Prepared by: Ricoondo & Associates, Inc.

Exhibit 10

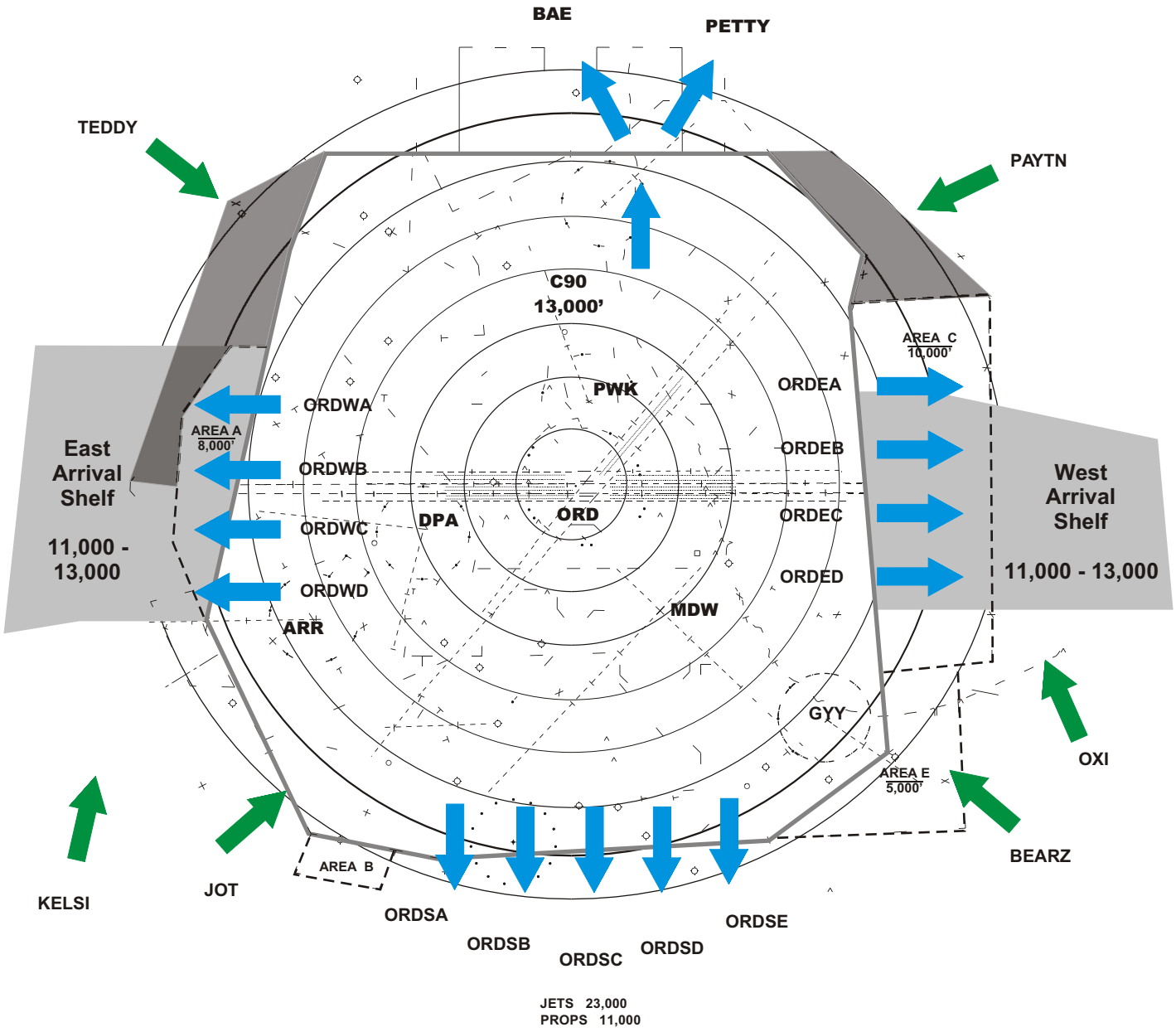
north

Airspace Boundary

Airspace Shelves

Current Airspace

Z:\\Chicago\ORD\OMP\Project Definition Notebook\Materials\4-23-IFR East Flow.cdr



Source: Ricondo & Associates, Inc., C90 TRACON
Prepared by: Ricoondo & Associates, Inc.

Exhibit 11

north

Shift in Arrivals

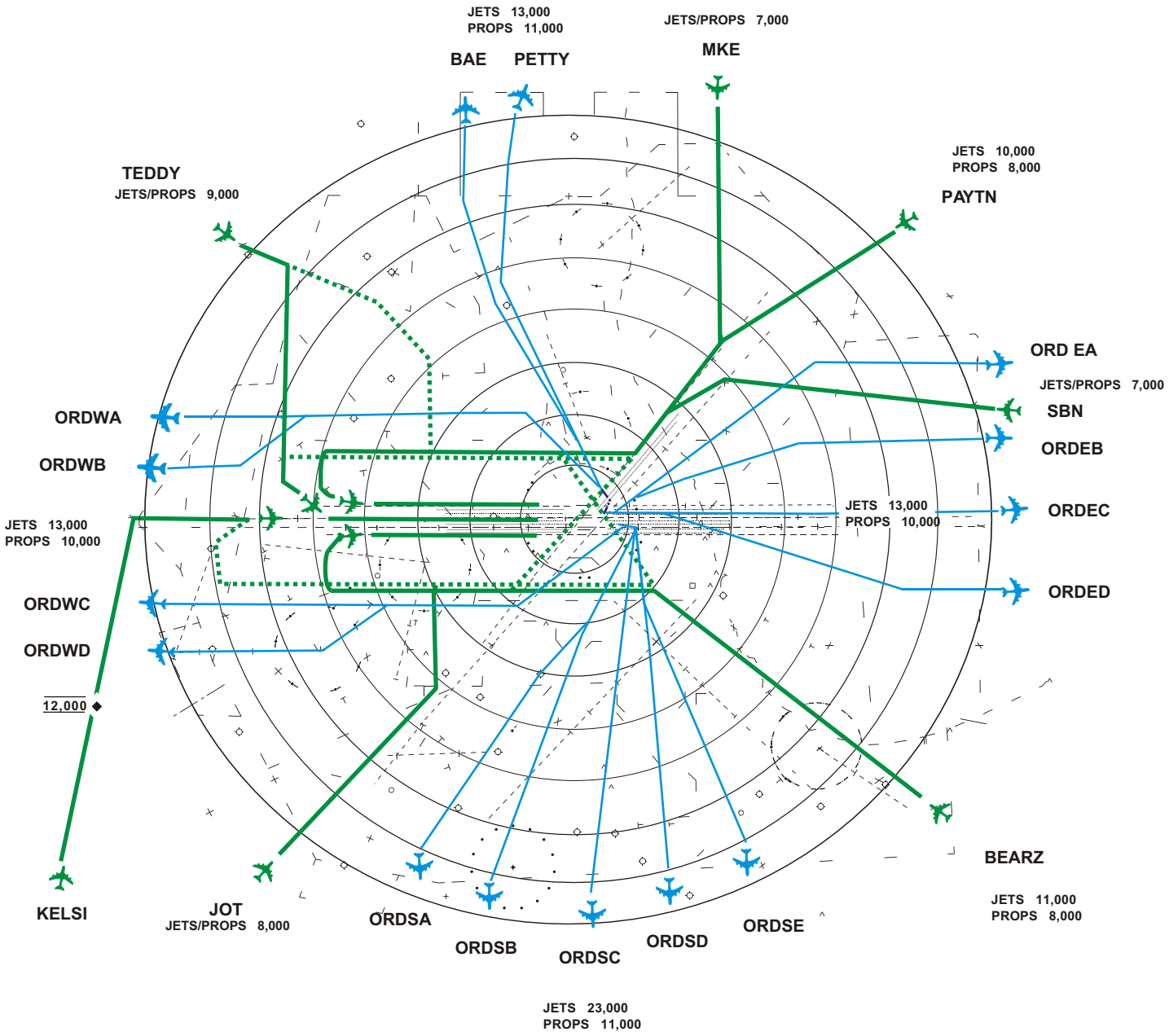
Shift in Departures

Airspace Boundary

Airspace Shelves

Potential Future Airspace

Z:\\Chicago\ORD\OMP\Project Definition Notebook\Materials\Current Airspace.cdr



Source: Ricondo & Associates, Inc., C90 TRACON
Prepared by: Ricondo & Associates, Inc.

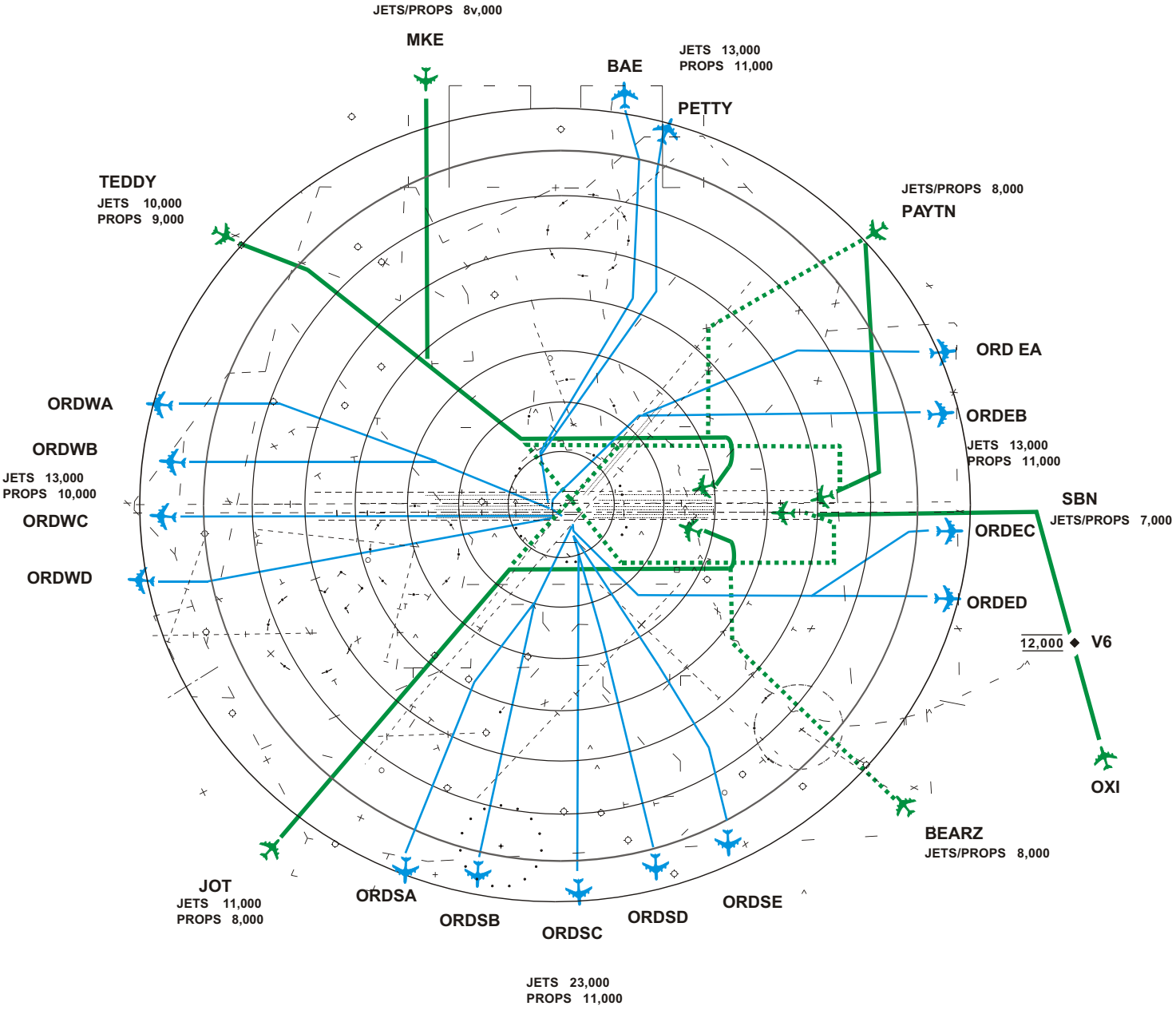
Exhibit 12

north

Primary Arrival Route
Secondary Arrival Route
Departure Route

Airspace Routes
VFR East Flow

Z:\\Chicago\ORD\OMP\Project Definition Notebook\Materials\4-23-IFR East Flow.cdr



Source: Ricondo & Associates, Inc., C90 TRACON
Prepared by: Ricondo & Associates, Inc.

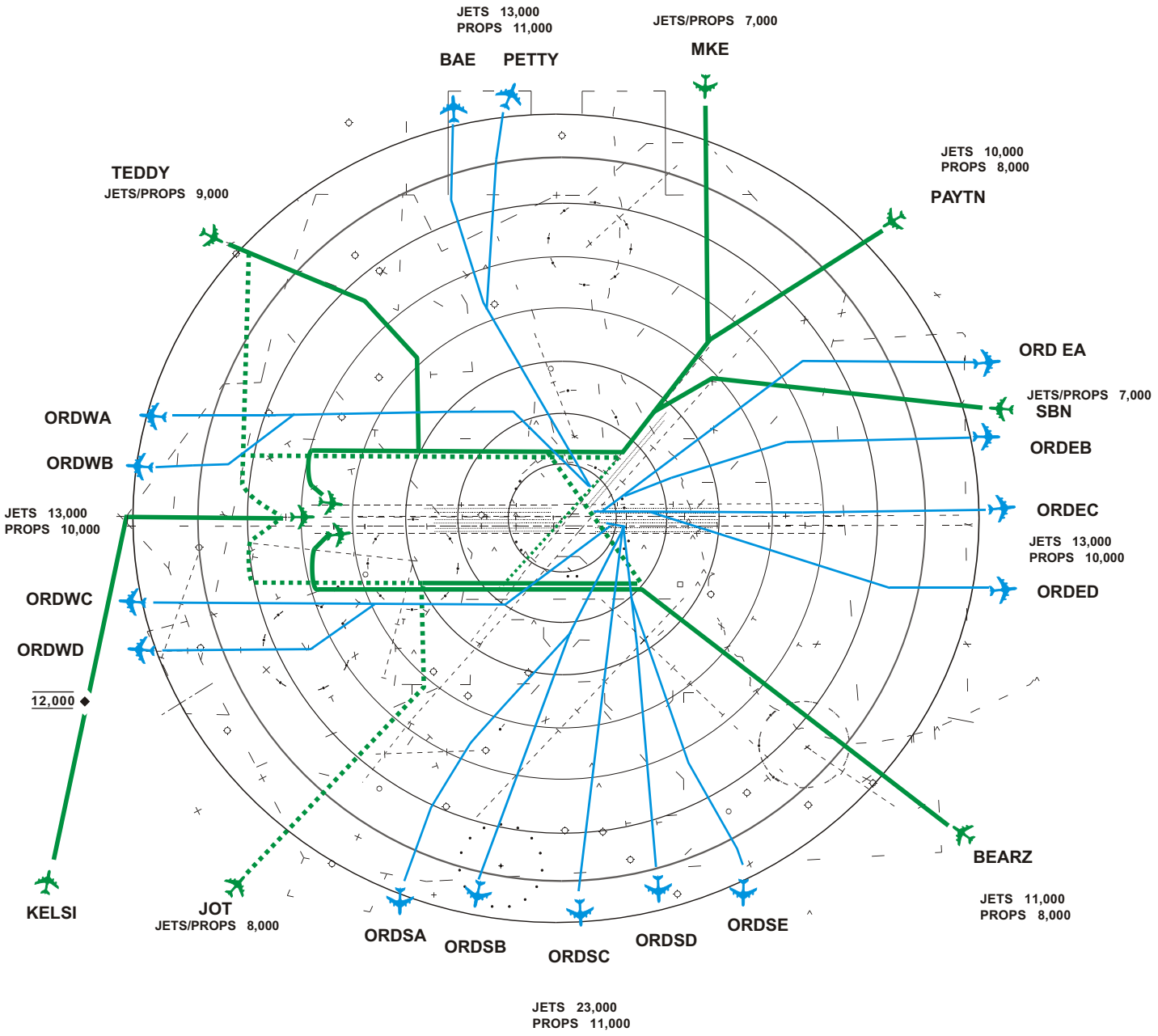
Exhibit 13

north

Primary Arrival Route
Secondary Arrival Route
Departure Route

Airspace Routes
VFR West Flow

Z:\\Chicago\ORD\OMP\Project Definition Notebook\Materials\4-23-IFR East Flow.cdr



Source: Ricondo & Associates, Inc., C90 TRACON
Prepared by: Ricondo & Associates, Inc.

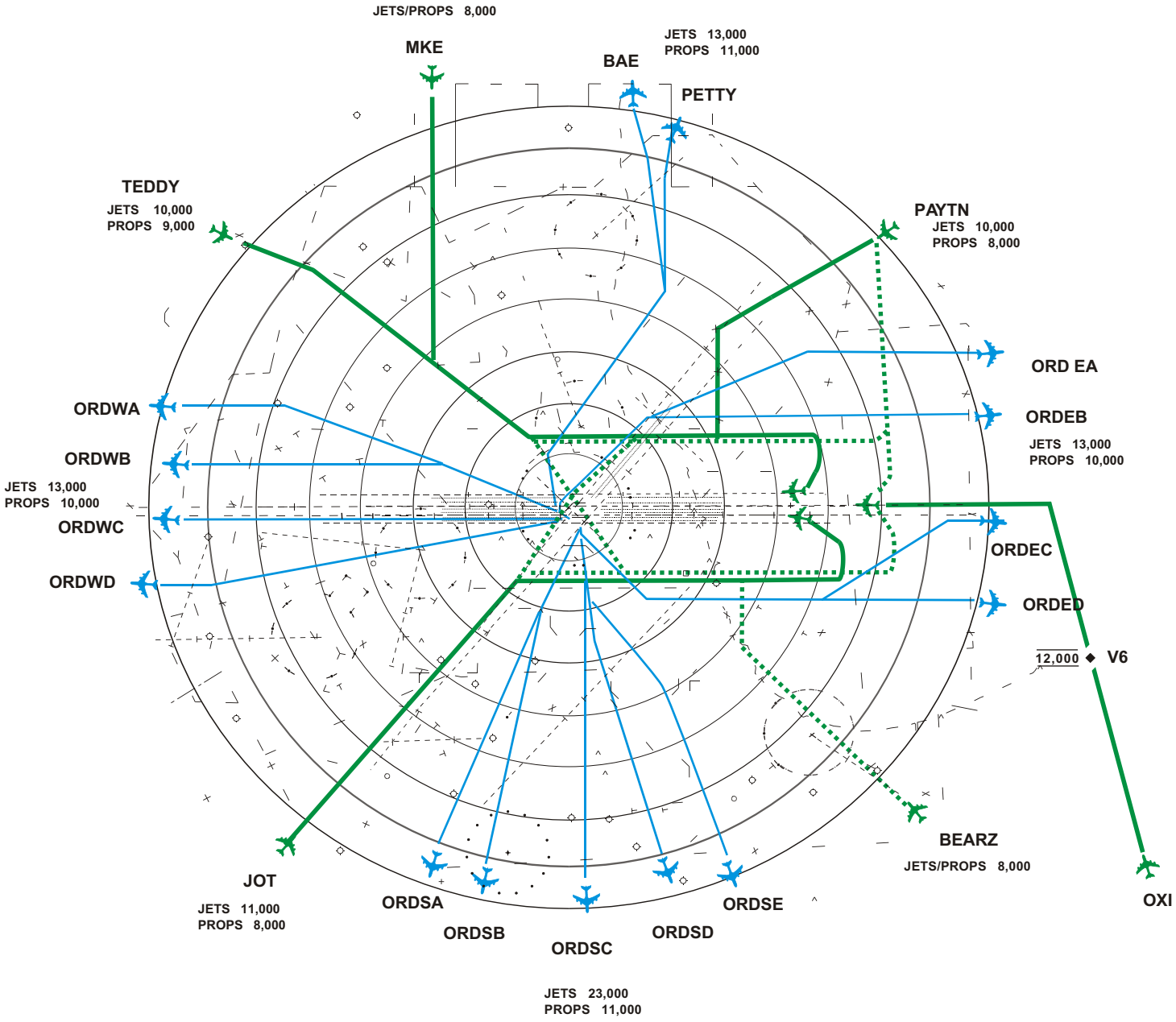
Exhibit 14

north

Primary Arrival Route
Secondary Arrival Route
Departure Route

Airspace Routes
IFR East Flow

Z:\\Chicago\ORD\OMP\Project Definition Notebook\Materials\4-23-IFR East Flow.cdr



Source: Ricondo & Associates, Inc.
Prepared by: Ricondo & Associates, Inc.

Exhibit 15

north

Primary Arrival Route
Secondary Arrival Route
Departure Route

Airspace Routes
IFR West Flow

Z:\\Chicago\ORD\OMP\Project Definition Notebook\Materials\4-23-IFR East Flow.cdr

3.2.3.3 IFR East Configuration – The IFR East Configuration consists of three arrivals on Runways 9L, 9C, and 10C and departures on Runways 9R, 10L and 10R. Exhibit 14 depicts the primary arrival and departure paths associated with this operating configuration.

Departures - Eastbound traffic is routed on east departure tracks whereas westbound traffic is routed north and south of the Runway 9/10 descent area. Departure traffic destined for cities in the northwestern U.S., Canada and some Pacific Rim traffic will be routed north of the arrival descent area while traffic destined for cities between DFW and the LAX Basin will be routed south of the descent area.

3.2.3.4 IFR West Configuration – The IFR West Configuration consists of three arrivals on Runways 27R, 27C, 28C and departures on Runways 27L, 28R and 22L. Exhibit 15 depicts the primary arrival and departure paths associated with this operating configuration.

Departures - Westbound traffic is routed on west departure tracks whereas eastbound traffic is routed both north and south of the arrival descent area. Aircraft destined for New England, Eastern Canada and some European cities will be routed north of the Runway 27/28 descent area while traffic destined to CLE, PIT, JFK, EWR and the Washington DC area will be routed south of the descent area.

4. Terminal Plan

The terminal layout for the OMP is sized to accommodate demand associated with a Peak Month Average Day (PMAD) schedule for 2018 based on the 2001 FAA Terminal Area Forecast (TAF). A total of 232 gates, including those planned under the World Gateway Program, are provided under the plan. The primary characteristic of the OMP terminal plan is the development of a western terminal facility (Terminal 7) and associated gates, with ground access from York Road. The Western Access is planned to allow for, and work in conjunction with, the extension of the Elgin-O'Hare Expressway and/or Western By-Pass connecting I-90 and I-294). These airport facilities would be developed on existing Airport property west of existing Runway 14R-32L, which would ultimately be closed. Terminal development in the existing Core Terminal Area and the East Terminal Area (existing Terminal 5 and future Terminal 6) is planned consistent with the World Gateway Program (WGP) and the existing approved ALP dated May 2002. Characteristics of the terminal development in each area are discussed below.

4.1 Existing Core Terminal Area

Terminal development proposed in the Core Area is generally consistent with the WGP and approved ALP. Specifically, the extension of Concourses G and K and the development of Terminal 4 (including enabling projects) remain as previously planned.

Redevelopment of Terminal 2 to provide wide-body aircraft gates as proposed on the approved ALP is no longer considered under the OMP. Development of Federal Inspection Services (FIS) capable gates is instead proposed in the new west terminal development. Development of FIS facilities in the Terminal 2 complex, however, is not precluded by the OMP.

4.2 East Terminal Development Area

The East Terminal Area will be developed consistent with the WGP. Specifically, Terminal 6 will be constructed east of Terminal 5 in an area now occupied by the Lynx Cargo facility, Sky Chefs, Police Station, Delta Cargo and the Airport Transit System maintenance facility. Terminal 6 will provide 16 gates ranging in size from Regional Jets (RJ) to Jumbo Wide Body (Boeing 747/777 and Airbus A-330/340) aircraft.

4.3 New West Terminal Development Area

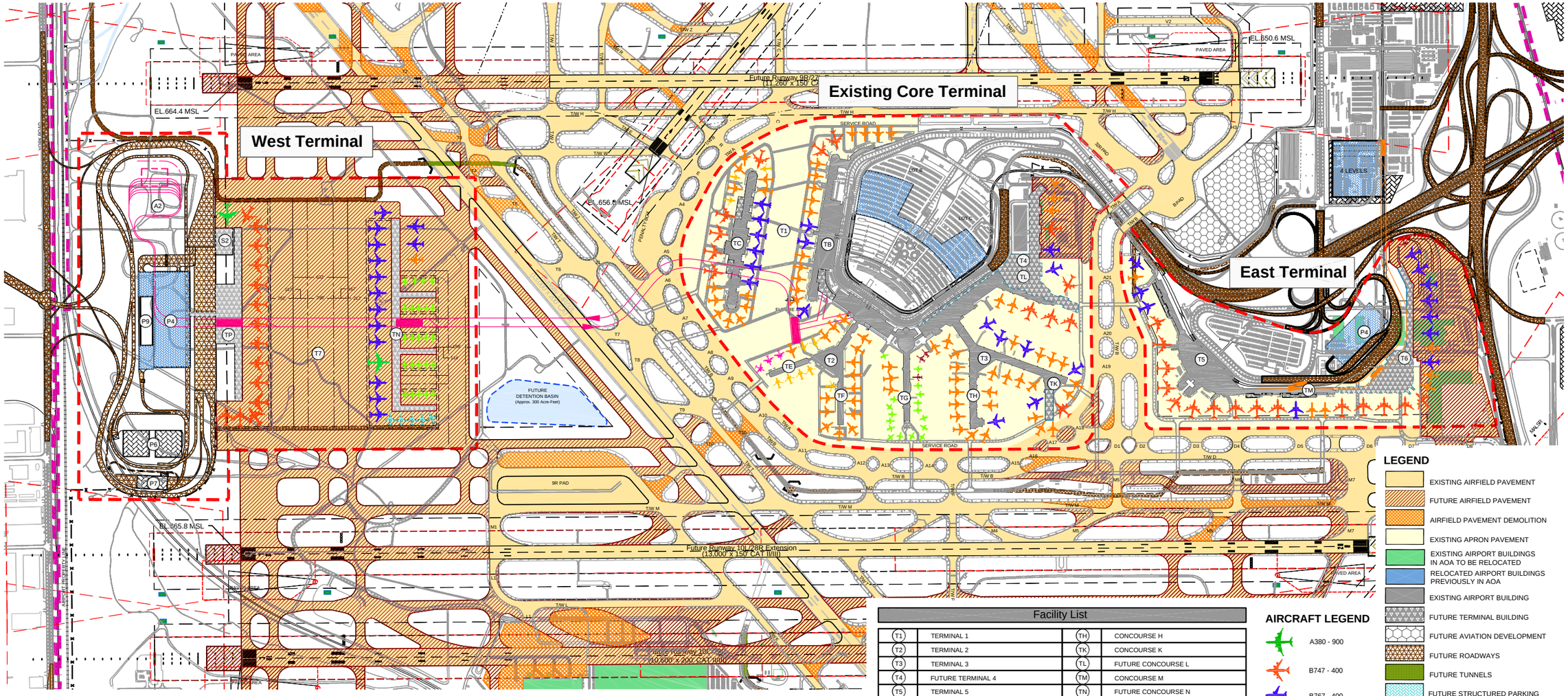
A satellite concourse that can accommodate a mix of RJ and/or larger aircraft will initially be constructed in the West Terminal Area. In total, 45 gates accommodating a mix of jumbo, wide-body, narrow-body and RJ aircraft are planned. However, depending on ultimate airline needs, this facility could accommodate a larger number of RJ-only gates.

Dual ADG IV taxilanes will be constructed along the east side of the satellite concourse and dual ADG VI taxilanes will be constructed to the west of the satellite concourse to serve both the satellite and, ultimately, the gates on the west terminal. In addition, push-back areas will be provided abeam ramp areas on the east side of the west terminal (262 feet to accommodate ADG VI aircraft) and the west side of the satellite concourse (213 feet to accommodate ADG V aircraft) to facilitate aircraft movements. These areas provide sufficient space to allow push-back operations from these gates without impacting operations on the adjacent taxilanes. Taxilane facilities within the West Terminal Area would not be under the control of FAA Air Traffic Control (ATC) but would instead be controlled by west terminal ramp control facilities.

Ultimately, a west terminal facility with ground access from York Road will be developed. This facility will have an attached single loaded concourse that can accommodate 15 jumbo wide-body gates. FIS facilities to serve the satellite concourse and west terminal would also be developed.

A secure Automatic People Mover (APM) system will link Terminal 1/Terminal 2 to the new satellite concourse and West Terminal Area. Though not proposed as part of the OMP, this system could ultimately be extended to serve all concourses of the Airport. Additionally, a new Heating and Refrigeration Plant that will support the west terminal will be developed adjacent to the terminal component and east of the terminal landside roadway.

Exhibits 16 through **19** depict future terminal development. **Table 3** summarizes the existing and planned terminal facilities, and **Table 4** shows the breakdown of gates by size.



Gate Summary

Existing Core		East Terminal		West Terminal		Total
T1	45	T5	17	T7	60	
T2	26	T6	16			
T3	56					
T4	12					
Total	139	33		60		232

Facility List

T1	TERMINAL 1	TH	CONCOURSE H
T2	TERMINAL 2	TK	CONCOURSE K
T3	TERMINAL 3	TL	FUTURE CONCOURSE L
T4	FUTURE TERMINAL 4	TM	CONCOURSE M
T5	TERMINAL 5	TN	FUTURE CONCOURSE N
T6	FUTURE TERMINAL 6	TP	FUTURE CONCOURSE P
T7	FUTURE TERMINAL 7	A2	APM MAINTENCE & STORAGE YARD
TB	CONCOURSE B	P4	PARKING STRUCTURE
TC	CONCOURSE C	P6	BUS/LIMO STAGING AREA
TE	CONCOURSE E	P7	TAXI STAGING AREA
TF	CONCOURSE F	P9	RENTAL CAR QUICK TURN AREA
TG	CONCOURSE G	S2	HEATING & REFRIGERATION FACILITY

AIRCRAFT LEGEND

- A380 - 900
- B747 - 400
- B767 - 400
- B757 - 300
- B737 - 900
- A320 - 200
- A319
- CRJ - 700
- CRJ - 50S

Source: Ricondo & Associates, Inc.
Prepared by: Ricondo & Associates, Inc.

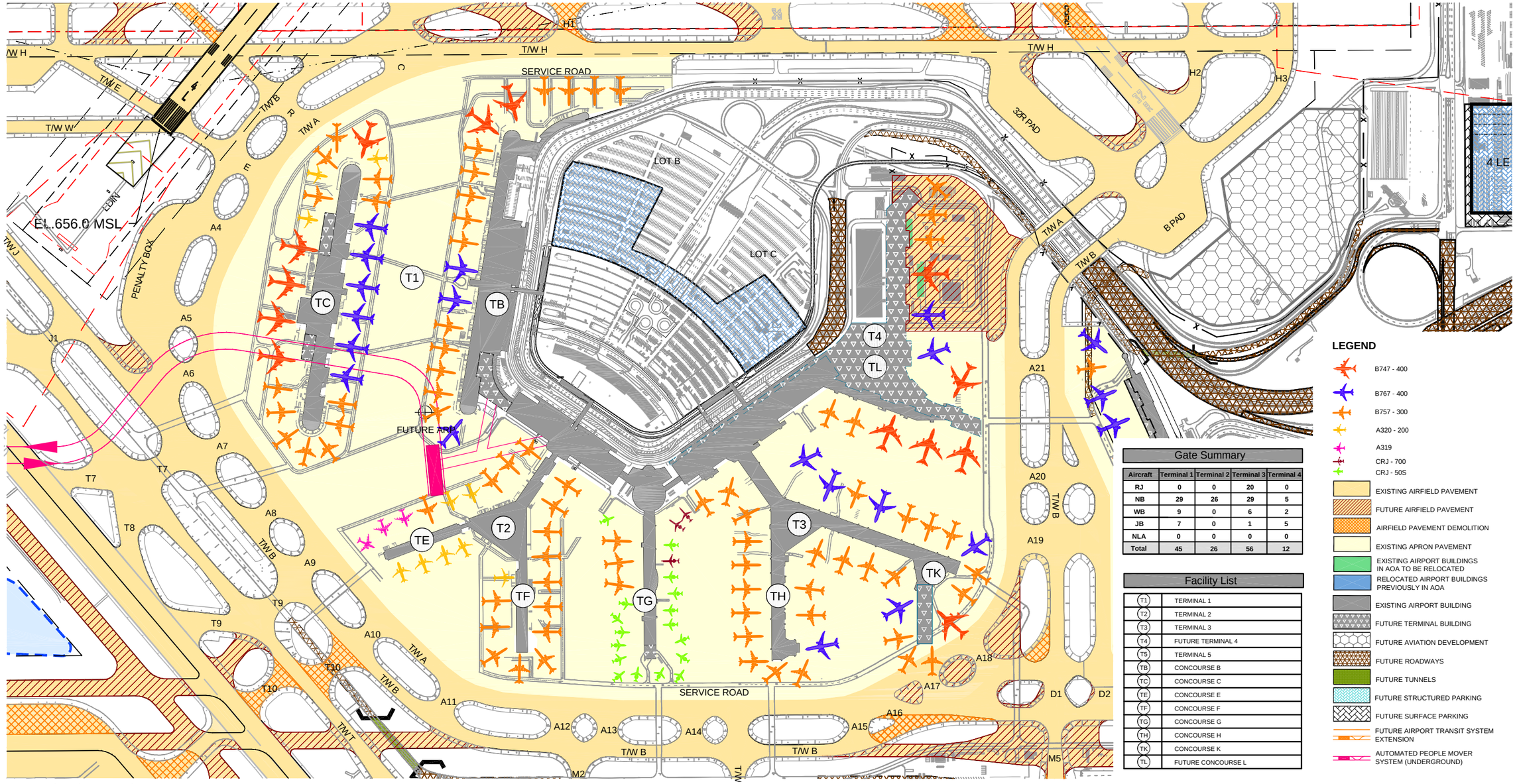
Exhibit 16

0 1200

north

Composite Terminal Plan

Drawing: Z:\Chicago\ORD\OMP\Facilities\Documentation\Project Definition\Terminal\Current\Terminal Exhibits-Project Definition-Composite.dwg_Layout: Exhibit 16_Feb 03, 2003, 7:35pm



Gate Summary

Aircraft	Terminal 1	Terminal 2	Terminal 3	Terminal 4
RJ	0	0	20	0
NB	29	26	29	5
WB	9	0	6	2
JB	7	0	1	5
NLA	0	0	0	0
Total	45	26	56	12

Facility List

T1	TERMINAL 1
T2	TERMINAL 2
T3	TERMINAL 3
T4	FUTURE TERMINAL 4
T5	TERMINAL 5
TB	CONCOURSE B
TC	CONCOURSE C
TE	CONCOURSE E
TF	CONCOURSE F
TG	CONCOURSE G
TH	CONCOURSE H
TK	CONCOURSE K
TL	FUTURE CONCOURSE L

LEGEND

- B747 - 400
- B767 - 400
- B757 - 300
- A320 - 200
- A319
- CRJ - 700
- CRJ - 50S
- EXISTING AIRFIELD PAVEMENT
- FUTURE AIRFIELD PAVEMENT
- AIRFIELD PAVEMENT DEMOLITION
- EXISTING APRON PAVEMENT
- EXISTING AIRPORT BUILDINGS IN AOA TO BE RELOCATED
- RELOCATED AIRPORT BUILDINGS PREVIOUSLY IN AOA
- EXISTING AIRPORT BUILDING
- FUTURE TERMINAL BUILDING
- FUTURE AVIATION DEVELOPMENT
- FUTURE ROADWAYS
- FUTURE TUNNELS
- FUTURE STRUCTURED PARKING
- FUTURE SURFACE PARKING
- FUTURE AIRPORT TRANSIT SYSTEM EXTENSION
- AUTOMATED PEOPLE MOVER SYSTEM (UNDERGROUND)

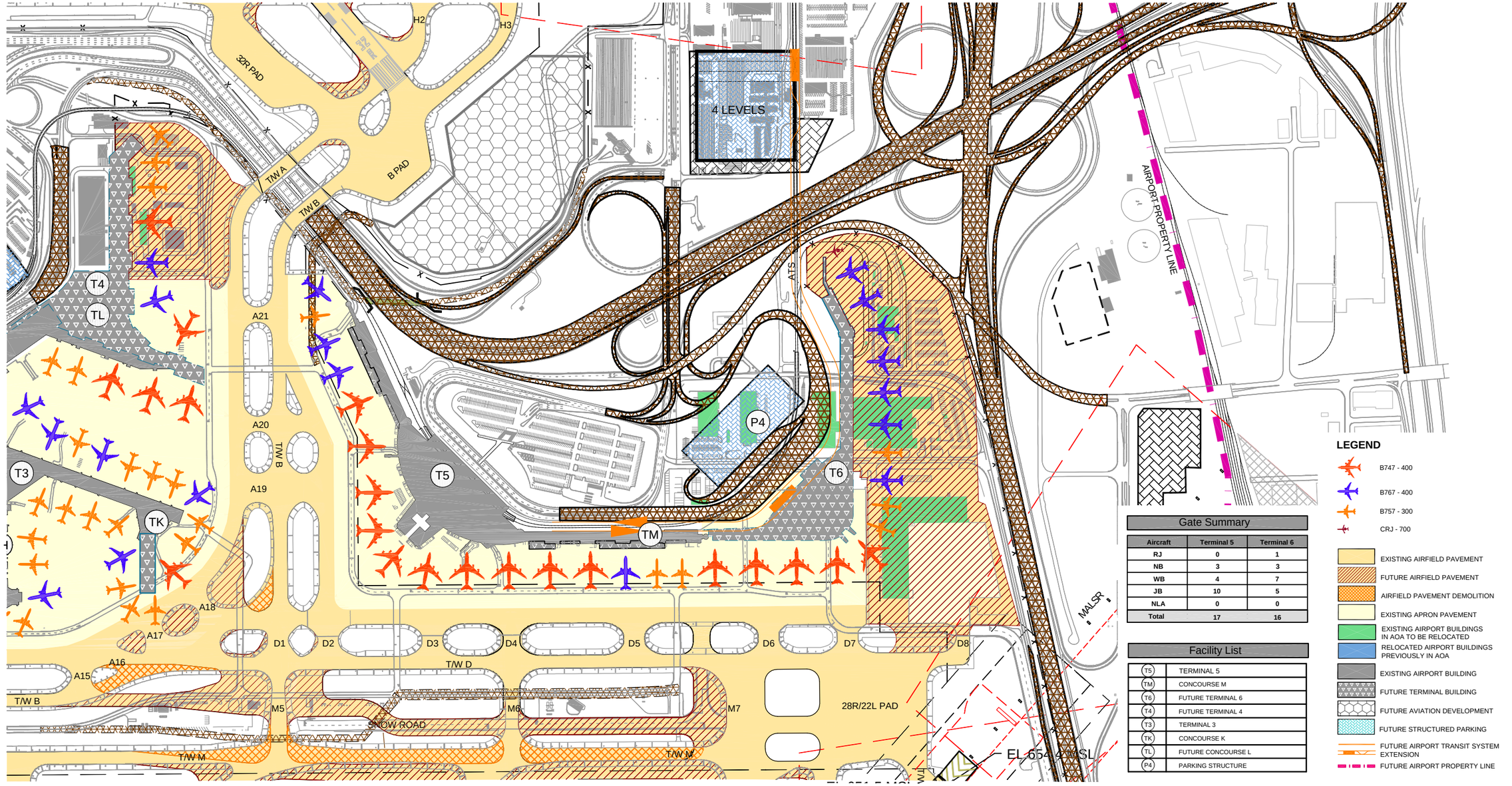
Source: Ricondo & Associates, Inc.
Prepared by: Ricondo & Associates, Inc.

Exhibit 17

0 600 north

Existing Core Area Terminal Plan

Drawing: Z:\Chicago\ORD\OMP\Facilities\Documentation\Project Definition\Terminal\Current\Exhibits - Core - East - West.dwg_Layout: Exhibit 17_Feb 03, 2003, 7:59pm



Gate Summary

Aircraft	Terminal 5	Terminal 6
RJ	0	1
NB	3	3
WB	4	7
JB	10	5
NLA	0	0
Total	17	16

Facility List

T5	TERMINAL 5
TM	CONCOURSE M
T6	FUTURE TERMINAL 6
T4	FUTURE TERMINAL 4
T3	TERMINAL 3
TK	CONCOURSE K
TL	FUTURE CONCOURSE L
P4	PARKING STRUCTURE

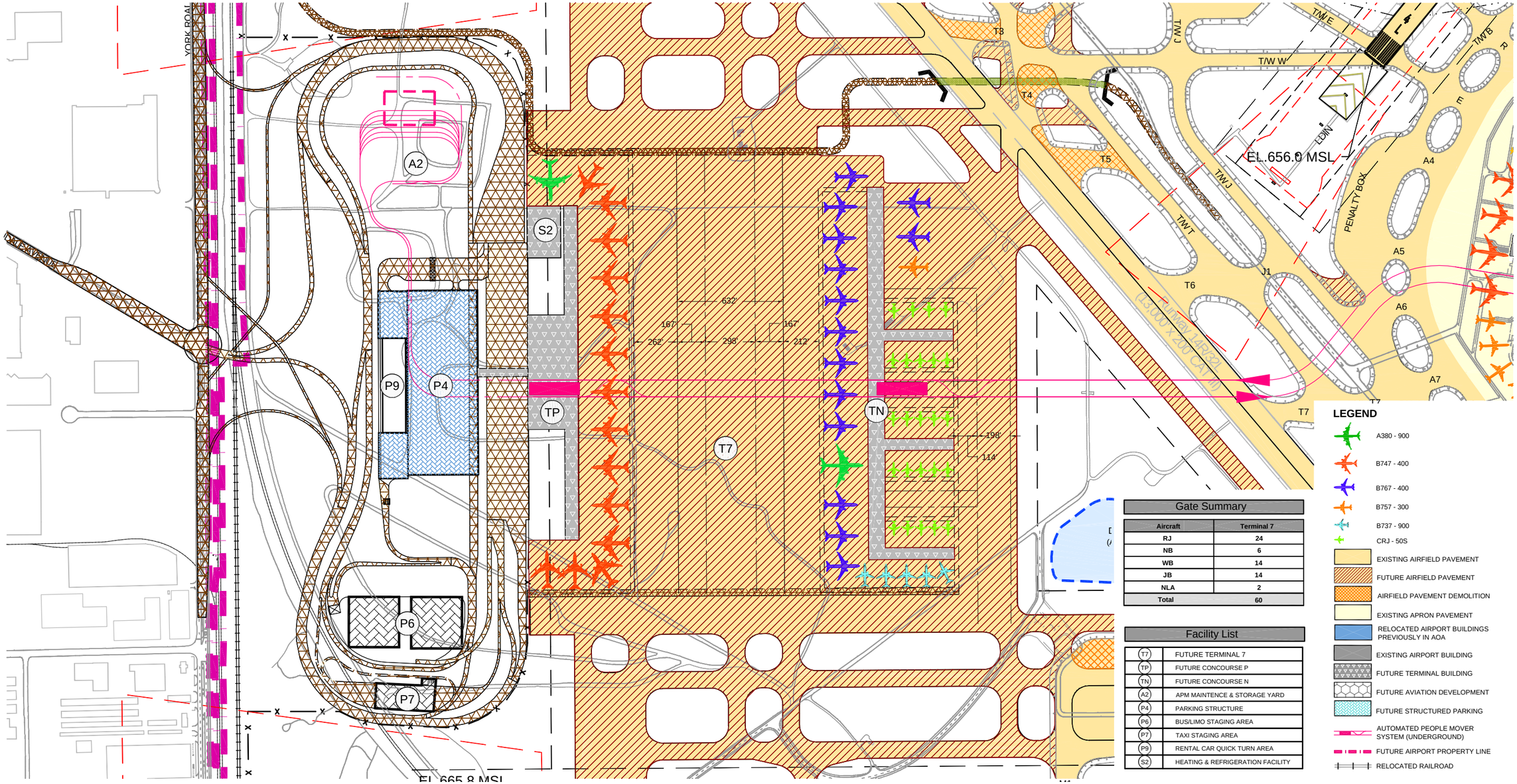
Source: Ricondo & Associates, Inc.
Prepared by: Ricondo & Associates, Inc.

Exhibit 18

0 600
north

East Terminal Plan

Drawing: Z:\Chicago\ORD\OMP\Facilities\Documentation\Project Definition\Terminal\Current\Exhibits - Core - East - West.dwg_Layout: Exhibit 18_Feb 03, 2003, 7:55pm



Gate Summary

Aircraft	Terminal 7
RJ	24
NB	6
WB	14
JB	14
NLA	2
Total	60

Facility List

T7	FUTURE TERMINAL 7
TP	FUTURE CONCOURSE P
TN	FUTURE CONCOURSE N
A2	APM MAINTENCE & STORAGE YARD
P4	PARKING STRUCTURE
P6	BUS/LIMO STAGING AREA
P7	TAXI STAGING AREA
P9	RENTAL CAR QUICK TURN AREA
S2	HEATING & REFRIGERATION FACILITY

Source: Ricondo & Associates, Inc.
Prepared by: Ricondo & Associates, Inc.

Exhibit 19

0 600
north

West Terminal Plan

Drawing: Z:\Chicago\ORD\OMP\Facilities\Documentation\Project Definition\Terminal\Current\Exhibits - Core - East - West.dwg_Layout: Exhibit 19_Feb 03, 2003, 8:03pm

Table 3

Terminal Facility Summary

Facility	Existing Facilities		Planned WGP		OMP	
	Approximate Building Area (sf)	Nominal Gates	Approximate Building Area (sf)	Nominal Gates	Approximate Building Area (sf)	Nominal Gates
Core Terminal Area						
Terminal 1[1/]	1,165,535	50	1,216,002	50	1,216,002	45
Terminal 2[2/]	982,045	45	998,104	15	982,045[4/]	26[4/]
Terminal 3[3/]	1,473,345	73	1,484,585	74	1,484,585	56
Terminal 4	n/a	n/a	608,207	10	608,207	12
Core Terminal Total	3,620,925	168	4,306,898	149	4,290,839	139
East Terminal Area						
Terminal 5	1,136,199	21	1,229,306	17	1,229,306	17
Terminal 6	n/a	n/a	569,770	18	569,770	16
East Terminal Total	1,136,199	21	1,799,076	35	1,799,076	33
West Terminal Area						
Satellite Concourse (T7)	n/a	n/a	n/a	n/a	617,070	45
West Terminal (T7)	n/a	n/a	n/a	n/a	918,390	15
West Terminal Total	n/a	n/a	n/a	n/a	1,535,460	60
Total	4,757,124	189	6,105,974	184	7,625,375	232

1/ Includes Concourses B, C, T1 Link

2/ Includes Concourses E, F, T2 Link

3/ Includes Concourses G, H, K, L, Rotunda, T3 Link

4/ Reconfiguration of Terminal 2 as envisioned in the WGP is not included under OMP.

Source: Ricondo & Associates, Inc.; City of Chicago Department of Aviation; and CAD Services.
Prepared by: Ricondo & Associates, Inc.

Table 4

Aircraft Gates by Terminal

Facility	Aircraft Type	Existing Facilities	Planned WGP	OMP
Terminal 1	Commuter	0	0	0
	RJ	0	0	0
	Narrow Body	33	23	3
	Large Narrow Body	5	10	26
	Wide Body	8	12	9
	Jumbo	4	5	7
	NLA	0	0	0
	Total	50	50	45
Terminal 2[1/]	Commuter	13	0	0
	RJ	12	0	0
	Narrow Body	19	3	10
	Large Narrow Body	1	0	16
	Wide Body	0	2	0
	Jumbo	0	10	0
	NLA	0	0	0
	Total	45	15	26
Terminal 3	Commuter	0	0	0
	RJ	20	22	20
	Narrow Body	34	30	0
	Large Narrow Body	4	8	29
	Wide Body	12	10	6
	Jumbo	3	4	1
	NLA	0	0	0
	Total	73	74	56
Terminal 4	Commuter	n/a	0	0
	RJ	n/a	0	0
	Narrow Body	n/a	0	0
	Large Narrow Body	n/a	0	5
	Wide Body	n/a	5	2
	Jumbo	n/a	5	5
	NLA	n/a	0	0
	Total	0	10	12
Terminal 5	Commuter	0	0	0
	RJ	0	0	0
	Narrow Body	1	0	0
	Large Narrow Body	0	1	3
	Wide Body	7	3	4
	Jumbo	13	13	10
	NLA	0	0	0
	Total	21	17	17
Terminal 6	Commuter	n/a	0	0
	RJ	n/a	0	1
	Narrow Body	n/a	7	0
	Large Narrow Body	n/a	3	3
	Wide Body	n/a	3	7
	Jumbo	n/a	5	5
	NLA	n/a	0	0
	Total	0	18	16
West Terminal (T7) and Satellite	Commuter	n/a	n/a	0
	RJ	n/a	n/a	24
	Narrow Body	n/a	n/a	5
	Large Narrow Body	n/a	n/a	1
	Wide Body	n/a	n/a	14
	Jumbo	n/a	n/a	14
	NLA	n/a	n/a	2
	Total	0	0	60
Total – All Terminals	Commuter	13	0	0
	RJ	32	22	45
	Narrow Body	87	63	18
	Large Narrow Body	10	22	83
	Wide Body	27	35	42
	Jumbo	20	42	42
	NLA	0	0	2
	Total	189	184	232

1/ Reconfiguration of Terminal 2 as envisioned under WGP is not included under OMP.

Source: Ricondo & Associates, Inc.
Prepared by: Ricondo & Associates, Inc.